## SEMINAR: SUSTAINABLE ACCESS AND LOCAL RESOURCE SOLUTIONS Date : 28 – 30 November 2005

# TITLE: Dissemination of SEACAP 17 Activities in Lao PDR

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# LAO PEOPLE'S DEMOCRATIC REPUBLIC Peace Independence Democracy Unity Prosperity

## Contents

		r i i i i i i i i i i i i i i i i i i i	page
1	Intro	duction	1
2	Proje	ect Dissemination Strategy	1
	2.1	Dissemination of Information	2
	2.2	Workshops and Seminars	5
3	Trair	ning	6
4	Main	streaming	7
	4.1	International Donors	7
	4.2	MCTPC	7
5	Cond	clusion	8

## 1 INTRODUCTION

Lao PDR is a developing country in South East Asia, bounded by China, Thailand, Myanmar, Cambodia and Vietnam. The population is 5.5 million (2002) of which 39% are below the national poverty line.

Of the total road network of 31,209km, the national road network is 7,141km of which 53% is paved and 73% in good condition. However for the local road network (provincial district and rural roads) comprising 24,068km, only 3% is paved. Access constraints remain significant, with 26% of national roads and 34% of provincial roads experiencing closure over more than 3 months per year. About 10 percent of all district centres do not have year-round access by road, and almost one third of all villages are without road access at any time.

SEACAP 17 will carry out research to extend the present methodologies for the construction of rural access roads used locally, and in SE Asia generally, to cover specific road lengths in difficult terrain in Lao PDR. The study aims at identifying cost-effective community-based methods of improving all-year access to the rural poor through low-cost local resource-based improvement of these problem lengths of road. Pavement options being trialed include:

- Bamboo Reinforced Concrete
- Otta Seal:
- Geocell
- Hand Packed Stone
- Mortared Stone
- Concrete Paving Blocks

The project is being implemented under the ADB funded Northern Economic Corridor (NEC) Project.

## 2 PROJECT DISSEMINATION STRATEGY

The trial pavement designs being introduced through this project have been successfully implemented in other countries in the region. However previous projects in Lao PDR have stayed with the conventional gravel and asphalt pavements. There is therefore a lack of knowledge of alternative pavements within Lao PDR and the ability to successfully implement them.

The lessons learned from the construction and maintenance of alternative pavements within Lao PDR must be made available to all practitioners within Lao PDR and to the international community to add to the existing knowledge base. The transfer of

knowledge and dissemination of information are key aspects of SEACAP and are an ongoing activity during the project. Dissemination of the research results alone will not ensure the adoption of the improved pavement technology offered by the SEACAP trials and the project will include the mainstreaming process outlined in this paper.

## 2.1 Dissemination of Information

One of the main objectives of the project is to disseminate information within Lao PDR and via international and regional agencies. For this process to be a success, the information must easily accessed and available to a wide audience. To achieve this objective, the progress and outcome of the pavement trials will be distributed throughout MCTPC and the provincial offices and to the international community by the following means.

# 2.1.1 Electronic Document Library / Database

The project will produce various reports and guidelines which will be distributed in hard and soft copy versions. Through the SEACAP Coordination Committee, an electronic document library will be established to store the project documents and make them accessible to MCTPC and other interested parties..

A database has also been designed in MS Access to record data on the trial pavements and their environment. This database can also be used to gather data from other projects to provide a wider range of research and development activities.

Ownership of the library and database will be with MCTPC with assistance from the project.

## 2.1.2 Newsletter

A newsletter has been prepared as part of the SEACAP 17 dissemination strategy and will be used to provide information on the ongoing pavement trials. We also believe the newsletter has a wider role in providing information on all research and development activities within MCTPC and articles will therefore feature other projects which include any research or innovation.

The newsletter also serves to provide information to MCTPC and DCTPC staff on development projects in the region and also to



identify other sources of information, particularly through the internet.

It is intended to distribute copies of the newsletter though the SEACAP Coordination Committee to all divisions of MCTPC and the DCTPC offices, either as a hard copy or electronically by email.

The newsletter will also be available to any other interested organisations or individuals. The newsletter will be produced in English and Lao versions, which will enable the newsletter to reach a wide audience.

#### 2.1.3 MCTPC Website

Under the World Bank funded Road Maintenance Project 2, MCTPC is developing an information and communication technology (ICT) strategy to meet its information and communication needs.

The intention is to move ministry staff from where they are now to higher levels of IT efficiency and reliance. This will include providing technical and business skills necessary to develop and maintain leading applications and generating widespread ICT fluency within the ministry. The main objectives of this strategy are:

- Highlight the importance of ICT to the future of the ministry.
- Develop a supportive environment for innovative ICT
- Provide the necessary business and technical skills necessary to develop and maintain applications and generate ICT fluency in the ministry
- Provide a secure communications infrastructure to provide broadband connectivity for industry, high quality services to the general community and high bandwidth links between researchers.
- Provide an effective and coordinated approach to e-government

In the short term (1-3 years) this strategy will include the following components that can be used for the dissemination of information on research activities:

- MCTPC intranet
- MCTPC internet
- Basic management information systems
- Web site development

These will be developed further through medium and long term initiatives.

Initially the MCTPC web site will be used to disseminate information to MCTPC and provincial staff. as well as to internet users in general. This will be expanded to include other ministries and organisations within Lao PDR. Links can also be embedded to other organisations web sites such as gTKP.

#### 2.1.4 Coordination

In addition to the general dissemination of information about the SEACAP trials, there is the need to have forums where ideas can be presented and discussed. Two such forums are being introduced to provide MCTPC and consultant staff with the opportunity to exchange ideas.

#### SEACAP Coordination Committee

MCTPC has formed a SEACAP Coordination Committee (SCC), which will be the focus for all research activities and information dissemination. Members of the committee include representatives of the Local Road Division and the Planning and Technical Division along with a representative from the Provincial office in the project area.

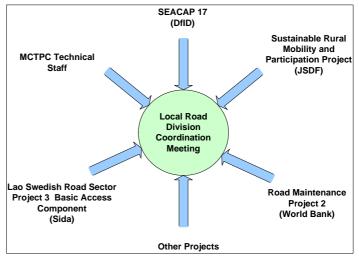
The SCC will meet on a regular basis, currently scheduled at three monthly intervals. These meetings will focus on the research aspects of the project and will be the means to disseminate information within MCTPC and local organisations. In this role, the SCC will make a valuable contribution to the success of the project through the promotion of the SEACAP objectives to the key decision makers and the implementation divisions.

The SCC is also linked to the MCTPC Research and Development Committee (RDC) of the Planning and Technical Division, who will be actively involved in the data interpretation under Module 3. The outcome of the research will be presented in guidelines for use on future projects. The SCC and RDC will be instrumental in

mainstreaming the results of the research within MCTPC.

## LRD Coordination Meetings

At present MCTPC have a number of development projects, ongoing or due to commence shortly. They share a common objective with SEACAP in providing sustainable access to rural



communities. There are obvious benefits to be gained from wider coordination and cooperation between these projects and we have proposed a bi-monthly coordination meeting within the Local Road Division of the Department of Roads. This will include a representative of each project together with MCTPC technical staff to disseminate information and discuss issues of common interest.

By sharing experiences, the projects can review and refine their own activities to incorporate good practices from other projects. Attendance at the meetings by MCTPC technical staff will ensure that they can learn from the discussions between the projects and can make contributions based on their own experiences.

#### 2.1.5 International Links

International workshops provide the ideal opportunity to disseminate information and to exchange ideas on development issues.

Somnuk Mektakul, Deputy Director Local Road Division and SEACAP Project Coordinator presented a paper at the IFG meeting in Arusha in March 2005 and at the SEACAP Workshop in Phnom Penh in June 2005. Both papers focussed on the issues of rural road maintenance in Lao PDR and how SEACAP 17 can contribute to providing sustainable access for rural communities.

Somnuk Mektakul has been elected to the IFG executive committee, which provides MCTPC with a place within the international community to exchange information and ideas on development issues.

The internet also provides a valuable link to international research and development organisations. Web sites such as gTKP, ID21 etc. provide a wealth of information to learn about issues relevant to Lao PDR. The project will aim to publish information on these and other web sites in the newsletter to ensure the research activities reach a wide audience.

## 2.2 Workshops and Seminars

Attendance at international workshops and forums offers MCTPC the opportunity to learn about regional and international developments and to inform the international community on the various initiatives being undertaken in Lao PDR to overcome the problems of access to rural communities.

Through the SEACAP 17 project, MCTPC has organised and representatives have attended workshops involving Lao PDR and the international community

## 2.2.1 Knowledge Exchange Workshop, Vientiane

A Knowledge Exchange workshop was held at the Ministry of Communication, Transport, Post and Construction in Vientiane on the 15th and 16th December 2004 to introduce SEACAP and the SEACAP 17 project to the staff and consultants of MCTPC and to share experiences from projects within Laos PDR and from the SE Asia region and worldwide. The workshop was attended by delegates from DfID, Lao PDR, other SEACAP projects and regional and other international delegates.

## 2.2.2 International Focus Group

Somnuk Mektakul, Deputy Director Local Road Division and SEACAP Project Coordinator was invited to present a paper on sustainable rural road maintenance at the IFG meeting in Arusha, Tanzania in March 2005.

At the IFG meeting, Somnuk was elected to the IFG Executive Committee. He has since attended the IFG committee meeting in Mombasa, Kenya.

## 2.2.3 SEACAP Workshop, Phnom Penh

This workshop, attended by key personnel from MCTPC, provided the opportunity to learn about other SEACAP initiatives and to visit the surfacing trials in Siem Reap, Cambodia.

Somnuk Mektakul presented a paper on community participation in rural road maintenance, which again highlighted the key issues faced by Lao PDR in providing sustainable rural access.

# 2.2.4 Pavement Design Workshop

Towards the end of the project a pavement design workshop will be held in Vientiane. This will serve to generate buy-in from the various stakeholders on the strategy for pavement design and construction. The workshop will also be used to discuss further research options and the means for mainstreaming the pavement technology. The workshop will form part of the information dissemination strategy and will where possible involve TKP, IFG and other international organisations.

## 3 TRAINING

During the pavement trials, training sessions will be conducted to ensure transfer of knowledge at all levels in the province. The training will be in the form of workshops, discussion groups and on-the-job training and will cover all aspects of the research together with management issues relating to the project implementation.

The trial pavements are new to Lao PDR and to ensure their success, all parties involved must understand the design, construction and quality control issues. There is also the need to develop an understanding of the pavements being introduced and to promote the benefits of long term solutions.

The target groups for the training will include:

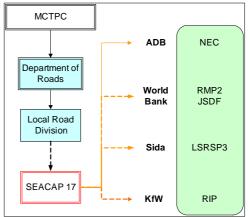
- MCTPC/DCTPC staff
- Contractor
- Local village groups

Further training will be carried out within MCTPC to provide the capability to manage the SEACAP database and to continue with publication of the newsletter.

## 4 MAINSTREAMING

## 4.1 International Donors

The ultimate success of the project in Lao PDR will be the adoption of the trial pavements by MTCPC and by the international donors on future projects.



Discussions have taken place with donors and their consultants on the pavement trials and options being implemented.

As well as the co-operation with ADB on the

current project, considerable interest has been shown by the World Bank and Sida and both organisations are considering the possibilities of adopting SEACAP pavements and introducing them as additional trials into their upcoming projects. Other donors including the Japan Social Development Fund and KfW are funding small projects in Lao PDR which provide further opportunity for liaison on the SEACAP pavements.

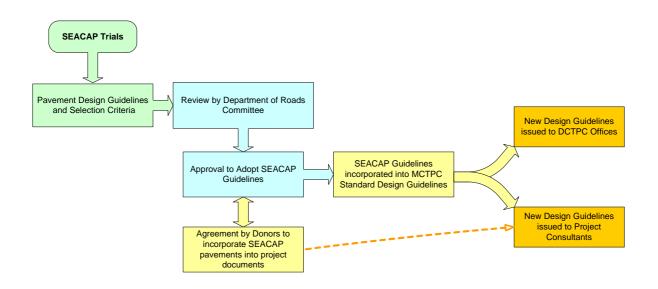
During the trial pavement construction we will encourage donors and their project consultants to visit the trials to gain first hand experience of the pavements and their environment and to discuss construction techniques with the supervision staff, contractor and local communities.

## 4.2 MCTPC

SEACAP 17 will present the findings of the pavement trials in the form of reports, guidelines and specifications. MCTPC staff and donors have already expressed

interest in the pavement trials, however this will not ensure that the pavement designs are adopted by the government or the donor funded projects. It is essential that the pavement design guidelines are incorporated into the MCTPC standard guidelines and that the international donors recognise the SEACAP pavements as viable and sustainable alternatives to the standard gravel pavements.

The process that SEACAP 17 and MCTPC will adopt to mainstream the outcome of the research is shown in the following flow chart.



The process of formal adoption of the SEACAP guidelines and their incorporation into the MCTPC Standard Design Guidelines will give the MCTPC and provincial staff the option of using the 'SEACAP' pavement.

The project documents produced during project preparation also play a significant role in determining the construction techniques to be adopted on projects. With the backing of the international donors, the project documents can specify the use of the 'SEACAP' pavements in certain circumstances.

Together, these two approaches will ensure that 'SEACAP' pavements become part of the standard construction practices in Lao PDR.

## 5 CONCLUSION

SEACAP 17 will conduct pavement trials during the construction of the access roads on the NEC project. Works are expected to commence in December 2005. During construction, information on the trials will be disseminated and mainstreamed in accordance with the strategy outlined in the paper. With the links created through SEACAP 17 MCTPC will also be able to access information from SEACAP projects in the region and from other development and research project worldwide.

In this way Lao PDR will contribute to the international development initiatives as well as learning from the experiences of other development projects.

## **Dissemination Issues**

A problem facing MCTPC is finding out about what is happening in the rest of the world. Occasional attendance at workshops or visiting a web site we hear about is not enough and it is unrealistic to expect MCTPC senior staff to spend endless time surfing the internet in the hope of finding something relevant. So how do we get more information about new developments that can help Lao PDR? It is reasonable to assume that ministries in other countries face the same problem and there needs to be a mechanism whereby they have this information readily available.

This is where SEACAP, gTKP and others can make a difference by actively disseminating information. When the results of a research project under SEACAP or any other project are published, summary papers can be sent out to contacts at ministries in the region with details on how to get more information. This will ensure the information reaches a large audience and will generate more interest about the research activities. At present, we only hear about research and development activities when we attend seminars such as this.