PIARC workshop on the current state of Technology Transfer Center (TTC) development

Siem Reap, Cambodia

17 - 18 May 2002
Workshop program: Friday morning 17 May

- Session 1: Introduction
  - introductory remarks, role of PIARC and workshop objectives
  - round table of participants
  - presentation of main findings from pre-workshop questionnaire

- Session 2: Improving TTC performance based on experiences
  - Theme 1: What are the key success factors for TTC development in 2002?
  - case study presentation: Tanzania - Hagai BISHANGA
  - general discussion and sharing of experiences (see support)

- Presentation of FHWA TTC program: Stephen GAJ
Workshop program: Friday afternoon 17 May

- Presentation of WIN: Claire MONETTE
- Session 2: Improving TTC performance (continued)
  - Theme 2: What tools/policies are needed to enable TTCs to achieve high levels of customer satisfaction?
  - Analysing and measuring performance: David SULLIVAN
  - General discussion and sharing of experiences (see support)
  - Theme 3: What are currently the most efficient ways of meeting training needs for TTC development in 2002?
  - Improving access to technology transfer: Bertrand GUELTON
  - General discussion and sharing of experiences (see support)
  - Presentation from TRL on TTC: Colin GOURLEY
Workshop program: Saturday morning 18 May

- Session 3: Thinking forward
  - Analysing training needs - David SULLIVAN
  - General discussion and sharing of experiences
  - Theme 4: Which are the areas where PIARC and other donors could focus their assistance and support to aid future TTC development? - Colin ELLIS
  - Next steps to be carried out by individual countries regarding technology transfer and development of TTCs

- Evaluation of workshop and programme for next session

- End of workshop
Workshop goals

- Analyse and understand the current environment of a TTC
- Share experiences to date of established TTCs
- Provide an opportunity for TTC managers to benefit from the experience of others
- Present methodologies needed to enable each TTC
  - to diagnose more accurately their present level of performance
  - to better define staff training needs
Some basic questions about YOUR country’s roads

- From your personal knowledge of your country’s road system and using approximate figures, please indicate on the flip chart:
  
  - what is the total size in km of your national road network, paved and tracks, excluding the rural networks?
  
  - within this network, what % do paved roads represent?
  
  - how many light vehicles are there on your roads?
  
  - and how many heavy trucks?
The perceived benefits of setting up a TTC

- Main objective to facilitate the acquisition and dissemination of technology and best practices by:
  - promoting beneficial policies, technologies & programs
  - avoiding duplication of products and process developments
  - evaluating and adapting technology to local needs and expertise
  - involving the local road community and its knowledge
  - improving skills of practitioners leading to better road systems
Basic characteristics a TTC

- a repository for information about technologies and resources
- a conduit between developers and users of technology & policy
- a focal point for advancing best practices using various means
- a platform for systematic technology transfer to meet local needs
- a catalyst for improvements and enhancements of local practices
Successful technology transfer centres do exist

- Effective TTC exist around the world, eg the LTAP in USA which maintain 5 basic mandatory activities:
  - compile and update a mailing list of users and stakeholders
  - publish a quarterly newsletter to communicate on success stories
  - conduct or arrange seminars and training sessions
  - provide material and information
  - evaluate effectiveness of program and process feedback
PIARC initiative in 1999 to foster setting up of TTC

- Targeted on low income member countries < US$ 1000 p.capita

  ➢ Now more than 8 countries involved: Bangladesh, Burkina Faso, Chad, China, India, Madagascar, Mongolia, Tanzania….

  ➢ resources and scope of activities of existing TTC logically vary widely depending on the country and their context

  ➢ difficulty of measuring performance and success

  ➢ organisation and institutional integration also vary
Core activities of TTC in pilot countries

- The 8 pilot countries which have joined the PIARC sponsored scheme to set up a TTC have agreed as a minimum to sustain the operation of a small office and a number of core activities:

  - managing a small library of key documents
  - maintaining internet access for exchange of information
  - providing a list of relevant websites and training courses
  - issuing a regular newsletter to public and private stakeholders
Pre - workshop TTC questionnaire (1)

« Who are the key public and private partners and shareholders for your TTC ? » :

- administrations, national and local government bodies
- academic and research facilities specialised in road transportation
- professional road transport sector federations & associations
- Institutes of Engineers & Architects, the Police, Road Safety...
- road maintenance firms, consultancies, US FHWA, Donors...
“What missions and objectives were fixed for your TTC at its creation?”:

- collect and disseminate information (WIN) about international best practices to all identified national road transport stakeholders,
- promote innovation and progress, hosting conferences, organizing delegations, training sessions...
- increase effective public and private involvement in road transport sector, including educational establishments
- set up the centre, recruit staff, collect existing documentation etc
Pre - workshop TTC questionnaire (3)

« How were these missions and objectives achieved ? » :

- many TTC have only recently become professionally active
- hosting conferences, organizing delegations, training sessions...
- establishing the notoriety of the TTC and gaining national support
Pre-workshop TTC questionnaire (4)

« What problems were encountered? »:

- for many countries, physically setting up the TTC, recruiting staff etc is the first problem encountered
- insufficient funding is a common problem which compromises the TTC performance, autonomy and sustainability
- insufficient dissemination of available information
- excessive time spent in searching for information
- communicating on the scope of the PIARC initiative to foster TTC development and gain support from potential stakeholders
Pre-workshop TTC questionnaire (5)

« How does your TTC assess its performance relative to its different missions? »:

- many TTC have only recently become professionally active, but they intend to analyse the number of meetings and training sessions organised.
« What is the agenda for your TTC for the year 2002 and beyond? »:

- implement core activities - library, newsletter, training, seminars
- set up an Operating Board and a TTC management team
- recruit new staff…and retain existing staff
- recruit staff competent in IT skills
Pre - workshop TTC questionnaire (7)

« What equipment does your TTC currently possess ? » :

- many TTC are newly resident in offices of parent organisation
- office equipment, phone, computers, fax, printers, scanners…
- publications from the road and transportation sector, video…
Pre-workshop TTC questionnaire (8)

« What new purchases are planned in the next year? »:

- office furniture, computers, fax, printers, scanners, video…
- internet installations, website index
- purchase IT software to set up databases
Pre - workshop TTC questionnaire (9)

- « How many people work in the TTC today….and in 2 years ? »
  - generally small scale operations with 1 manager (sometimes on a part time basis) and 1-2 staff mainly operating as administration and library assistants
  - with aim to increase staff numbers to 2-3 over next 3 years
Pre - workshop TTC questionnaire (10)

« How is the TTC currently managed? »

- most TTC have set up (or are about to) an Operating Board or Management Committee comprising members from key public and private stakeholder institutions

- these bodies generally approve annual budget proposals, work programmes and activity reports from TTC managers
What progress is being made relative to establishing core activities?

- hosting conferences, organizing delegations, training sessions...
- many TTC have only recently become professionally active but relevant activities are planned in the short term
- establishing the notoriety of the TTC and gaining national support
Pre-workshop TTC questionnaire (12)

« Are there measures or indicators of performance for the TTC? »

- Measurement of performance has not yet been dealt with in many cases but reflexions on defining indicators are taking place.
Does the TTC publish a periodic activities report?

- depending on the age of the TTC, a report is published every 2-6-12 months
Pre-workshop TTC questionnaire (14)

« What are the estimated training needs for TTC managers and other staff? »

- see tomorrow
Pre - workshop TTC questionnaire (15)

« Other remarks ? »

it is necessary to consider how revenues can be generated by TTC activities so as to assure its perenity - what experience do older TTC have on this issue ?
Measuring performance

- Defining criteria and indicators needed to quantify TTC performance levels relative to published missions and objectives:
  - Eg Mission: support all road transport sector stakeholders
  - Eg Objective: improve identification of TTC’s customer base
  - Eg Criteria: number of new clients identified
  - Eg Indicator: % of new clients identified over a 6 month period
Analysing training needs within the TTC

- Identification of skills available within TTC relative to current functions and work program

  ➢ drawing up of skill matrix showing present skill base and inadequacies

  ➢ identification of skill areas to be developed, people to be trained

  ➢ Choice of learning medium (training course, coaching, self-learning…)

- Assessment process of effects of training programs
Role of TTC directors in setting up a skill development programme

- Effectuer le diagnostic de la performance du service (*strengths & weaknesses*)
- Définir les projets d’évolution du service, cohérence avec les axes de développement des CCT
- Analyser les écarts entre la performance actuelle et la performance souhaitée,
- Identifier les moyens d’action pertinents
- Sélectionner le moyen d’action qui concerne le développement des compétences individuelles et collectives de l’équipe
Participants trained

Teaching / learning situations

Future participant

Training System

Value system

New work situation

Mesurement Of gains

Original work situation

FACTS

Value system

CHANGE OBJECTIVES

CAUSE ANALYSIS

MEANS

Equipment

Organisation

Humain Resources

Communication

Recruitment mobility

Skill development

TRAINING OBJECTIFS

Value system

Mesurement Of gains
Les facteurs individuels de la performance professionnelle

**Les compétences**

Les acquis liés à :

- la formation
- l’expérience

**Savoir**

**Les aptitudes**

- sur le plan intellectuel
- sur le plan physique
- sur le plan de la personnalité

**Pouvoir**

**Les motivations**

- les besoins
- les désirs
- les intérêts professionnels

**Vouloir**
La compétence

Savoirs formali­sés

- Connaissances *(savoir théorique)*
- Savoirs procéduraux *(techniques, méthodes)*

Savoirs de l’action

- Expérience *(apprentissages-pratiques)*
- Savoir-faire *(actes professionnels)*
Les facteurs explicatifs de la performance

**L'individu**
- Compétences
- Aptitudes
- Motivation

**Le système de management**
- Exigences de la fonction
- Niveau des objectifs fixés
- Moyens disponibles
- Rôle de la hiérarchie : assistance, contrôle
- Règles ou caractéristiques organisationnelles

**L'environnement extérieur**
- Aléas, imprévus favorables ou défavorables
- Contexte économique, social, commercial, technique

**Résultats**
La logique générale de détermination des besoins de développement de compétences

Dysfonctionnements

Objectifs de progrès

Besoin en compétences actuels

Définition des besoins de Compétences

Besoins en compétences à venir

Définition des besoins de formation

Autres modalités de développement des compétences

Projets d’évolution

Objectifs de projets