

Field Visit Report: Continuing Professional Development (CPD) Field Visit, Parbat, March 2015

1. Field Visit Details

Dates of Field Visit: 10th and 11th March 2015

Location of Field Visit: Kushma, Parbat

Field Visit Team: Er. Satya Naryan Shah (SNS), Chairman, Nepal Engineering Council (NEC); Er. Kishore Jha (KJ), General Secretary, Nepal Engineers' Association (NEA); Chandra Shrestha (CS), Nepal Representative, Institute of Civil Engineers UK (ICE); Suman Baidya (SB), Infrastructure Advisor, DFID; Siobhan Kennedy (SK), RAP3

Purpose of Field Visit: The objective of the field visit was to give the NEC and the NEA an opportunity to consider the practical aspects of developing CPD across the engineering sector in Nepal, by providing the chance to observe a pilot CPD programme in practice.

2. Introduction

Continuing Professional Development (CPD)¹ is considered by the NEA and NEC to be key for the development of the engineering sector in Nepal. To date, a great deal of progress has been made towards the establishment of a CPD training centre within the NEA. The NEA are in the process of establishing a management committee to run CPD training at the NEA building. 30-40% of the management committee representatives will be GoN and the other 60-70% will representatives from the NEA, NEC, SCAEF, FCAN, and academic institutions. The NEA Chairman will also be the Chairman of the management committee. In the long term, the NEA is aiming to establish an 'Engineering Staff College' which would be an autonomous and independent training institution that would be responsible for delivering CPD training courses. The NEA is hoping to become a member of the 'Engineers Mobility Forum (EMF)', the international body for regulating CPD and accreditation (responsible for Washington Accord), and in order to achieve this they must have the Engineering Staff College set up and running as it is a mandatory for EMF members to provide CPD.

In early 2015, RAP3 and ICE met with NEC and NEA to discuss the potential for the organisations to support the development of CPD for the engineering sector in Nepal, in particular as RAP3 had just launched a pilot CPD programme. The Rural Access Programme, Phase 3 (RAP3) CPD Programme involves all engineers working on RAP3, including RAP3 interns (RAP3 offers six month internships to recently graduated engineers), RAP3 graduates (a limited number of places on the graduate programme are made available to exceptional interns who wish to continue in the road sector), RAP3 field engineers (including consultant engineers), DTO / DDC field engineers, and RAP3 District Team Leaders (DTLs) / Engineering Officers (EOs). The RAP3 CPD Programme has three main components:

- 1. Annual LRN Engineering Course and Examination
- 2. On the Job Training
- 3. Self-Study

All members of the engineering team are required to record their CPD activities in the <u>RAP3 CPD log book</u> (the format for which can be found on the RAP website - http://www.rapnepal.com/cpd-log-book). Activities which are not documented in the log book, will not be considered to count towards the CPD programme.

CPD credits are awarded based on the CPD activities documented in the CPD log book. RAP3 has four levels which form the CPD certification system; level 1 requires 25+ CPD credits, level 2 requires 50+ CPD credits, level 3 requires 75+ CPD credits, and level 4 requires 100+ CPD credits. The participants in the CPD

16th March 2015 Page 1 of 8

¹ CPD is defined as the <u>systematic</u> maintenance, improvement, and broadening of <u>knowledge and skills</u>, and the development of <u>personal qualities</u>, necessary for the execution of professional and technical duties <u>throughout</u> a person's working life.



programme will be awarded a certificate on reaching each level.

During meetings, in February 2015, between the NEC, NEA, ICE, and RAP3 regarding CPD for the engineering sector in Nepal it was decided that a field visit by ICE, NEC, NEA, and DFID representatives to a RAP3 District to see the RAP3 CPD programme in practice would be useful. The original plan for the field visit was to travel to Jumla, however airport closures and bad weather led to the field visit being held in Parbat. This field visit report provides an overview of the field visit, as well as summarising the findings, and defining the next steps. A list of the acronyms and abbreviations used in this report can be found in Annex A: Acronyms and Abbreviations.

3. Overview of Field Visit

The field visit began with a meeting with the LDO and the DTO Chief to discuss the RAP3 CPD programme. Both the LDO and DTO Chief were very positive about the CPD programme, and both stressed the need to include non-technical skills, in particular social and environmental aspects, in future. Both felt that they had already seen a positive impact as a result of the CPD programme, with DDC and DTO staff demonstrating improved knowledge and competence in the technical areas covered by the CPD programme.

The field visit team then held a meeting with all the participants in the CPD programme and discussed the programme with them. The overall feedback was extremely positive and the participants are clearly feeling a positive impact in their work as a result of the CPD training sessions. During this meeting the participants' CPD log books were reviewed by the field visit team, and the content of the training materials was discussed. The participants had similar thoughts to the LDO and DTO Chief, regarding the need to include non-technical skills in the CPD programme further.

The field visit team then held a meeting with the interns working on RAP3 in Parbat. There are three interns in total in Parbat District (and in all 14 RAP3 Districts); one engineer intern and two CTEVT interns (one Senior Technical Supervisor (STS) and one Inspector of Works (IoW)). The CTEVT interns are hired by the Supervision Consultant and so work within the Soil Test team, for RAP3. All of the interns gave extremely positive feedback regarding the RAP internship programmes, but they stated that the duration is too short and it would be preferable if the internships were longer. All felt that they were learning a great deal and were benefitting greatly from the experience working in the rural road sector.

The field visit team's final meeting was with the RAP3 District Team Leader (DTL) who is responsible for managing the CPD programme in the district and delivering all CPD training sessions. The DTL informed the field visit team that whilst managing and delivering the CPD training sessions was very hard work, it has been very positive so far, and has been a huge opportunity for him to develop his training skills and for the rest of the team build their competence on all aspects of the programme. The DTL informed the field visit team that to date he has not found any areas of the CPD programme where improvements are required, but understands that this is the pilot phase of the programme and there will be opportunities to review it over the course of the pilot phase.

The full list of the stakeholders met during the field visit can be found in Annex B: Stakeholders Met During Field Visit.

4. Matters Arising

District Training Days Schedule:

The training carried out in the Districts under the CPD programme falls under the 'District Training Days Schedule' which provides a schedule, and training day targets, for all trainings, orientations, and workshops that must be carried out in the RAP3 Districts each year. The District Training Days Schedule Parbat is shown below:

16th March 2015 Page 2 of 8



Maintenance Districts								
CPD	Course		Date	Persons	Groups/Dist	Days	Training Days	Remarks
1	Orientation of Local Parties Procurement (LRN Engineering Course Modules 3A, 3B, 3C, 3D, 3E, 3F)		Jan-15	10	1	. 1	10	Political Parties
2			Jan-15	10	1	. 1	10	DTO/SC/RAP staff in districts
3	Orientation User Groups/contractors		Feb-15	20	6	1	120	User Groups in Core Districts
4	Implementation (LR Modules 4A, 4B, 4D,	N Engineering Course 4E, 4F, 4G)	Feb-15	10	1	. 1	10	DTO/SC/RAP staff in districts
5	Quality Control (LRN Module 4C - Combin for 2 days training fo	e with Implementation	Feb-15	10	1	. 1	10	DTO/SC/RAP staff in districts
6	Bio Engineering (Par Course Module 2E)	t of LRN Engineering	May-15	10	1	. 2	2 20	DTO/SC/RAP staff in districts
7	Emergency Mainten Engineering Course	•	Sep-15	10	1	. 1	10	DTO/SC/RAP staff in districts
8	Rapid Survey (LRN E	ngineering Course	Sep-15	10	1	. 1	10	DTO/SC/RAP staff in districts
9	RMG		Nov-15	5	20	1	100	100 RMG Members
10	ARAMP (LRN Engine 1A, 1B, 1C, 1E, 1F)	ering Course Modules	Nov-15	10	1	. 1	10	DTO/SC/RAP staff in districts
11	Detailed Design (LRN Modules 2A, 2B, 2C,	N Engineering Course 2D, 2E (repeat 2E))	Dec-15	10	1	. 1	10	DTO/SC/RAP staff in districts
							320	
Annual Review Course		Date	Nos	Groups/Dist	Days	Training Days	Remarks	
1	District Review		Jul-15	50	1	. 2	100	DDC/ Parties/RAP/Public
							100	
					TOTALS		420	

The District Training Days Schedule is very comprehensive and addresses the training / orientation needs of all stakeholders involved in the programme. During the field visit, the NEC, NEA, and DFID representatives highlighted the importance of ensuring adequate orientation is provided to groups such as User Committees and Monitoring Committees so that ownership of the works is created. The LDO highlighted one incidence, which took place during RAP3's first implementation year, where a contractor has stated that the wall of a masonry side drain was damaged when a member of the monitoring committee kicked the wall when it had only just been constructed. SNS emphasised the importance of orienting monitoring committees on what methods they should use when monitoring works in order to avoid such incidences in future.

CPD Training Content / Materials:

- The LDO, and many of the CPD participants, highlighted an interest in seeing non-technical aspects, in particular, social and environmental aspects added to the CPD programme
- Currently there are two environmental modules included the RAP3 CPD programme (environmental design and environmental management)
- SNS suggested that for the bio-engineering CPD session (scheduled for May, 2 days duration) RAP3
 could get support from the DoR which has developed a large number of bio-engineering training
 materials and could provide resource persons for conducting bio-engineering training
- Overall the participants had found the CPD training sessions to be very useful, and felt more able to ask questions and discuss their work with their colleagues and peers.
- Some participants stated that the duration of the training sessions was too short and they felt that further
 time should be given. SK informed that the duration of the CPD sessions in the district is limited as they
 are 'refresher' trainings and the aim is to keep the duration to a minimum to limit disruption to day to day
 work
- One participant stated that the CPD training sessions should be held at the road sites as he had to miss part of one CPD training day as a UC called him and he had to go to the road site. SK emphasised the need to prioritise CPD training sessions and to plan works in advance so that all are aware that the participants will not be available on the days of the CPD training sessions. The field visit team emphasised the need for all stakeholders to make a commitment to the CPD programme and

16th March 2015 Page 3 of 8



emphasised the importance of the LDO and DTO Chief's commitment and backing for the CPD programme.

Self-Study:

- All of the participants were very appreciative of the self-study component of the CPD programme stating
 that they had never had such opportunity in their professional career previously and that they found it
 extremely beneficial
- To date, none of the participants had accessed the CPD Self-Study allowance (1,000 NPRs / self-study day, on a reimbursable basis, up to a maximum of 6,000 NPRs) as they had been conducting self-study using free materials available on the internet or that they already owned, e.g. Nepal Rural Road Standards (NRRS), Transportation Engineering text book, Public Procurement Act and Rules (PPA and PPR). The participants stated that they will probably start to require the self-study allowance soon as they undertake further study. One participant stated that they felt it would be better if the self-study allowance was increased.
- SK emphasised that self-study is the CPD participants' opportunity to consider non-technical aspects, and that they can choose any subject that is of interest to them.
- SB highlighted the wide variety of different ways in which self-study can be carried out. E-learning and work shadowing were two areas particularly highlighted. There is huge potential to use e-learning in Parbat as there is a very good internet service available.
- SK informed the participants that RAP3 TMO and the DTL can offer advice and guidance if they are unsure what self-study options to choose.
- SNS suggested that the participants should try to prepare case studies, presentations, and technical
 papers on their experiences for dissemination amongst their colleagues and peers. He urged the
 participants to view this as part of their CPD as it will build their capacity as well as supporting peer to
 peer learning.

CPD Log Book:

- All the participants in the CPD programme were very positive about the CPD log book. When asked by
 the field visit team if it is a burden to maintain the log book, all participants stated that they did not find it
 to be an excessive burden to fill in.
- The participants were also extremely positive about the requirement to maintain a daily diary or 'Day Book' with records of their work carried out each day. One participant (a DDC staff member) told the field visit team that she has found her daily diary to be extremely useful when preparing reports.
- The CPD log books were generally found to be correctly filled in, but there was one case where the
 results of the 'On the Job Training' examinations had been included in the section for the 'LRN
 Engineering Course' examination results. This was highlighted to the DTL and will be corrected
 accordingly.

Recognition of RAP3 CPD Certification:

- Several of the participants asked for clarification regarding the recognition of the RAP3 CPD certification, in particular what organisations will recognise the certificates
- SK informed all that currently the CPD certification is recognised by RAP3 only, but it is hoped that since RAP3 is a joint GoN and DFID initiative that other such projects would be able to recognise the RAP3 CPD certificates. SK also informed that whilst other organisations may not officially recognise the RAP3 CPD certificates, the participants would still be able to use the certificates and log books to demonstrate their development through their work with RAP3
- RAP3 TMO to send out clarification on this to all DTLs for dissemination to all CPD participants

Interns:

• There are three interns working in Parbat (and in all 14 RAP3 Districts); one engineer intern (a recently

16th March 2015 Page 4 of 8



graduated civil engineer, internship duration is 6 months) and two CTEVT interns (CTEVT pass-outs, one Senior Technical Supervisor (STS) and one Inspector of Works (IoW), internship duration is 12 months).

- The CTEVT interns work for the Supervision Consultant and so in Parbat district they are embedded within Soil Test's team.
- The interns were very positive about the internship programmes that RAP offers, but all stated that they felt the duration of the internships is too short and so restricts their ability to experience all aspects of the work. The engineer intern stated that he felt he had missed out on certain experiences in Humla district (where he was based for the first three months of his internship) due to the rotation to Parbat district.
- SK emphasised that RAP does not expect that the interns will gain experience across all aspects of the LRN component, and the exposure they are given is meant to provide them only with the initial step in their career.
- The interns informed that they would appreciate training on the use of AutoCAD and design software as
 this is something that is not covered under their academic courses. They also expressed an interest in
 training on the use of survey equipment as again this is an area that they felt was not sufficiently covered
 during their academic courses.
- The communication between the interns was discussed and the engineer intern informed that all 14 engineer interns communicate regularly via email and a closed facebook group which they established on joining RAP3. The CTEVT interns do not communicate regularly amongst themselves and the DTL suggested that this may be because they are not hired at central level like the engineer interns and so do not have the opportunity to meet each other before moving to their district base.
- The STS CTEVT intern informed that he was one of 40 pass-outs in his class and all are engaged in the
 five month 'On the Job Training' internship required by CTEVT to complete the course. A total of 19 of
 the pass-outs are working in the rural road sector and more than 80% have secured work beyond their
 internship.
- The IoW CTECT intern informed that the majority of pass-outs from his class are now working in the road
 or buildings sector and many are preparing for the GoN civil service exam or to return to study in order to
 complete a B.Eng.

5. Follow Up Action

The key follow up action after the CPD field visit is the CPD Workshop planned for Friday the 27th of March 2015. The half day workshop will run from 08:30-14:00 and aims to bring together stakeholders from across the engineering sector with three key expected outcomes:

- Move towards the establishment of a 'CPD Coordination Forum'
- Identify projects / organisations / companies with potential to introduce CPD into their work, or to establish internship and / or graduate programmes
- Identify potential support available to NEC and NEA for the preparation of a plan for the development of CPD across the engineering sector in Nepal (where NEC is the regulatory body, and will work with the GoN to make CPD mandatory, and NEA will provide training through the establishment of the 'Engineering Staff College')

The CPD workshop was discussed at length during the CPD Field Visit, and based on these discussions a revised plan for the CPD workshop will be prepared by RAP3 and it is proposed that a planning meeting for the workshop be held on Wednesday the 18th of March, at 2pm at the RAP office in Ekantakuna.

16th March 2015 Page 5 of 8



6. Photos



The CPD Field Visit Team's opening meeting with the LDO, and other staff members from the DDC and DTO.



The CPD Field Visit Team meeting with the CPD participants in Parbat District to discuss the CPD programme and review the participants CPD log books.

16th March 2015 Page 6 of 8



ANNEX A: ACRONYMS AND ABBREVIATIONS

ARE Assistant Resident Engineer

CPD Continuing Professional Development

CTEVT Council for Technical Education and Vocational Training

DDC District Development Committee

DFID Department for International Development, UK

DTL District Team Leader
DTO District Technical Office

EECCO Environment, Energy, and Climate Change Officer

EMF Engineers Mobility Forum

EO Engineering Officer

FCAN Federation of Contractors Associations Nepal

GoN Government of Nepal

ICE Institute of Civil Engineers, UK

IoW Inspector of Works

LDO Local Development Officer

NEA Nepal Engineers' Association

NEC Nepal Engineering Council

RAP3 Rural Access Programme, Phase 3
RE/TL Resident Engineer/Team Leader

SAARC South Asian Association of Regional Cooperation

SC Supervision Consultant

SCAEF Society Of Consulting Architectural And Engineering Firms, Nepal

SM Social Mobiliser

16th March 2015 Page 7 of 8



ANNEX B: STAKEHOLDERS MET DURING FIELD VISIT

Name	Organisation	Role
Anita Kumari Paudel	WASH	SM
Bhim Bahadur Kunwar	DDC	LDO
Binod Kumar Nayak	DTO	Sub-Engineer
Birendra Bahadur Thapa	DDC	Sub-Engineer
Bishnu Ram Bista	RAP3	DTL
Chandra Bahadur Cheetri	DDC	Senior Social Mobiliser
Chandra Prasad Pangali	DDC	Messenger
Devi Poudel	DDC	Storekeeper, Planning Section
Devi Sharma	DDC	DDC Staff, Planning Section
Harak Singh Dhami	Soil Test Ltd.	SM
Hari Prasad Gautam	DTO	Sub-Engineer
Manju Silakar	DDC	EECCO
Megh Sudhar Shrestha	Soil Test Ltd.	IoW
Nagendra Jirel	Soil Test Ltd.	STS, CTEVT Intern
Nagendra Subedi	DDC	Office Assistant
Nissen Dangol	RAP3	Office Manager
Prakash Lamsal	DDC	Senior Social Mobiliser
Rabindra Tiwari	DTO	DTO Chief
Raj Kumar Phuyal	Soil Test Ltd.	IoW, CTEVT Intern
Rajeev Chaudhary	Soil Test Ltd.	loW
Ram Chandra Paudel	DDC	Messenger
Ramakant Paudel	DDC	Sub-Engineer
Ramesh Bhandari	Soil Test Ltd.	ARE
Ramesh Lal Shrestha	Soil Test Ltd.	RE/TL
Ramesh Sharma	DDC	Sub-Engineer
Shivaraj Baral	DTO	Sub-Engineer
Sujan Manandhar	RAP3	Engineer Intern

16th March 2015 Page 8 of 8