



NORPLAN 

Course Completion Report Application of GIS to Hydrogeology

Report on “Water Quality Training for Technical Staff of Faryab province”

From 01 to 02 July 2013

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1. COURSE DATA

Name of course:	Procedure for water sample collection, calibration of field measurement instruments and measurement of water quality (physical, chemical and bacteriological) parameters
Number of participants:	15 trainees from FRRD, CHA, Faryab Economic department, INERSOS, Faryab Environmental protection Agency, Maimana Municipality and DACAAR
Location for training:	DACAAR north-west regional management office
Date of implementation	01 – 02 July, 2013
Course organiser	M. Hassan Saffi
Trainer	M. Hassan Saffi and Ahmad Jawid, Program/Technical Unit, DACAAR

2. COURSE OBJECTIVES

The main objective of this training course was to train Faryab provincial project staff about procedure of water samples collection from water points, calibration of field instruments and measurements of water quality (physical, chemical and bacteriological) parameters.

3. TRAINING FOCUS GROUP

In Faryab province there is a lack of professional staff with knowledge on procedures of water samples collection from water points, calibration of field instrument and measurements of water quality (physical, chemical and bacteriological) parameters. This is a gap in data collection and there is needed to enhance technical capacity of Faryab province staff that collect water quality data from the water points in the field. Therefore, the water quality-training course planed for enhancing data collection capacity of staff in Faryab province. The focus group of this training course was hydrologist, hydro geologist, geologist, mythologist, engineers and technicians (see table below with participants names).

S.NO	Name	Organization	Designation
3	Said Bahram	Faryab Water Management	Hydrologist
4	Mohammad Suhrab	Faryab Water Management	Metrologies
5	Abdul Qadir	Economics Department	Monitoring Engineer
6	Mohammad Qasam	Faryab Municipality	Head of water supply
7	Matiullah	DACAAR	BSF Field Officer
8	Qader Mohmmad	DACAAR	Supervisor
9	Mohammad Sarwar	CHA	Assistant Engineer
10	Eng-Namatullah	Environment Dep	Officer
11	Naqibullah Rezwani	INTERSOS	DRR officer
12	Mohammad Hadi	DACAAR	Geologist
13	Shah Mohammad	DACAAR	Assistant Engineer /WASH
14	Ziauddin	DACAAR	Field Officer/WASH
15	Saleh Mohammad	DACAAR	Field Officer/ WASH

4. THEORETICAL AND PRACTICAL WORK

The main theoretical part of the training course included water quality (physical, chemical and bacteriological) concepts, cause of water resources contamination (man made and natural contamination) in Faryab province, display physical, chemical and bacteriological contamination by maps, charts and graphs, water quality control (WQ) and quality assurances (QA), calibration of field instrument, procedure of water samples collection from water points, measurements of water quality parameters and recording water quality data in the format.

The main practical part of training course included the procedure of water sample collection in the field from water points, measurement of physical parameters (electrical conductivity, pH, temperature, dissolved oxygen, turbidity), measurement of coliform bacteria in the field, record measured data in the format. In the practical work for measurement of physical parameters used pH/ conductivity meter, turbidity meter and for the bacteriological analysis used PotaTest. For the chemical analysis Arsinator and Photometer 800 were used.

Please review the photos taken during training course for more information.

5. SUPPORT, EQUIPMENT, LOGISTICS AND FACILITIES

5.1 Training Hall

The training took place in DACAAR north-west regional management office training Hall in Faryab province. The training room was furnished with chairs, tables, and training equipment.

5.2 Training Timeline

The theoretical part of training course started on 01 July, 2013 at 9:00 AM and it ended at 15:30 PM with 1 hour break for lunch and prayers and 15 minutes for tea break. The theoretical part of training course started on 02 July, 2013 at 9:00 AM and it ended at 15:30 PM with 1 hour break for lunch and prayers and 15 minutes for tea break.

5.3 Training Equipment and Stationary

The training material and stationary (laptop computer, projector, projector screen, flip chart, markers, stationary, GPS, hard and soft copy of training materials, 2 number pH/conductivity meter, PotaTes, turbidity meter, Arsinator, Photometer 800, camera) were provided by DACAAR and NORPLAN.

5.4 Training Methodology

The methodology in the training included presentation, discussion, brainstorming, group assignments, group discussions and measured field data by water quality measurements devices.

5.5 Transport and Food

The participant attended in the training course without provision of transportation for pick and drop but NORPLAN compensated the transportation cost by paying \$10 per day per person. Tea breaks and lunch were provided by NORPLAN and facilitated by DACAAR during the training days.

6. COURSE EVALUATION: COMMENTS FROM PARTICIPANTS

The participants evaluated the training course. The summary of evaluation is as following:

Question 1: Did the training course meet your expectations?

1=Completely, 2=Partially, 3= Not at all,

Response: Completely : 86%, Partially 14%, Not at all 0%

Question 2: What do you think about the overall relevance of training course? Considering the limits on your time and the topics discussed?

1= Too Long, 2= Just right, 3 = Too short

Response: Too Long : 7%, Just right 73%, Too short 20%.

How relevant was the training workshop to your organization or project's need?

1=Very relevant, 2 = Somewhat relevant, 3 = Not relevant

Response: Very relevant: 93%, Somewhat relevant 07%, Not relevant 0%.

7. CONCLUSION

During the training course a good environment was created for participatory learning during the training sessions and teamwork in the field. The participants were encouraged to share their ideas, knowledge and experiences. The trainers used several different participatory methods that proved successful. The application of the training module was useful to the participants, which maintained their interest. The participants were also extremely appreciative of the training materials, sessions, and teamwork in the field and in the training hall and thankful for the work done to run the courses. The participants were all extremely attentive, cooperative, positive and appreciative of the course and this was seen as partly an indication of the years of lack of professional development. The participants will be able to use the skill and knowledge to improve their work performance on their job

8. RECOMMENDATIONS

- A follow-up course should be conducted for each topic to further develop the concepts.
- The training hall was not suitable for this kind of training course, it is needed to rent a suitable training hall for future training courses.
- There is need for other technical training for enhancing knowledge, technical capacity building of Faryab province technical staff for better implementation and data collection.
- The course duration of 2 days seems to be fine, but some of participants wanted more time and longer period.