

Outline draft to training courses to be addressed for the training plan to be prepared early in the Planning Phase, April 2012

Calculations

Person s trained	No. Trainin g person days:	# days trainin g
899	2733	194

Main topic	Purpose of training	Focu group	Duratio n, days	# parti- cipants	Course s	Organised by	Implemented by	Likely Location	Sum
<b>1 Specialist training Hydrogeology</b>									
1.1	Implementation and interpretation of VES techniques	specialist geophysicist	4	10	2	Norplan	Intern. Expert	Kabul Univ.	20 80 8
1.2	Implementation and interpretation of IP techniques	specialist geophysicist	4	10	1	Norplan	Intern. Expert	Kabul Univ.	10 40 8
1.3	Geophysical borehole logging	specialist geophysicist	3	10	1	Norplan	Intern. Expert	Kabul Univ.	10 30 6
<b>Hydrogeology general</b>									
1.4	The hydrogeology in Adghanistan	Hydrogeologists/ students	5	30	2	N	Univ/poly	Kabul?	60 300 10
1.5	Analysing data and maps	Hydrogeologists/ students	5	30	2				60 300 10
1.6	Method for planning and implementing hydrogeological provincial surveys	Hydrogeologists/ Water engineers, Gov, consult students	4	30	2	Norplan/ MRRD		MRRD	60 240 8
1.7	Hydrogeological investigations and methods	hydrologists/eng/technicians?	4	30	2		External support	Univ.	60 240 8
1.8	Planning hydrogeological survey	National, hydrpg. Engineers	3	30	1	Norplan	MRRD /Dacaar	MRRD	30 90 6
1.9	Planning hydrogeologica survey	Prov: engineers, hydrogeo,	3	20	3	Dacaar	Dacaar	Dacaar	60 180 6
1.1	Planning hydrogeological survey	Hydrogeologists/ students	2	10	2	Norplan/ Dacaar		University	20 40 4
1.1	Planning hydrogeological survey	Hydrogeologists, technicians, drillers,	2	5	2	Dacaar		Prov	10 20 4
1.1	Use of slumberger software		2	5		Dacaar	Dacaar	Dacaar	0 0 4
1.1	Technicians course in data collection and curation for survey existing water sources	Eng technicians	2	20	1	Dacaar	Dacaar	Nat	20 40 4
1.1	Technicians course in data collection and curation for survey existing water sources	Eng technicians	2	20	2	Dacaar	Dacaar	Prov	40 80 4
1.2	Water sampling and basic field analysis	Eng/ chemists/ tech	5	10	1	Norplan	Norplan/Dacaar	MRRD	10 50 10
1.2	Water sampling and basic field analysis	Eng/ chemists/ tech	5	10	1	Norplan	DACAAR	Prov	10 50 10
1.2	Remote sensing techniques for monitoring wells	Eng/ technicians	2	10	2	Dacaar	DACAAR	Nat/Prov	20 40 4
<b>2 Training methods</b>									
2.1	Training of trainers methods		2	10	1	Norplan/ norsk vann	Dacaar		10 20 4
2.2	Best practice in preparing training material and training manuals	Traininers MRRD, NGOS, others	4	20	1	Norplan/Nors k Vann	Dacaar	Dacaar	20 80 8
<b>3 GIS- MIS for sustainable dissemination of hydrogeological information</b>									
3.1	Design of wells database		4	15	1	Norplan	DACAAR	MRRD	15 60 8
3.2	Design fo web-based hydrogeological atlas interphase	IT specialists, MRRD,	3	10	1	Norplan	Norpl/Dacaar	MRRD	10 30 6
3.3	Design and maintenance of project web page	IT specialists, MRRD, NGOs; programs	3	10	1	Norplan			10 30 6
3.4	Use ArcGIS software	IT specialists, MRRD, NGOs; programs	3	15	1	Norplan		Univ, Kabul	15 45 6
3.5	How to use hydrogeological /water use atlas for planing rural water supply interventions	Hydrogeologists/ Water engineers, Gov. planners, consult students	1	20	3	Norplan	Univ/Dacaar	Univ/Poly	60 60 2
<b>4 Water and sanitation planning</b>									
4.1	Planning water supply and sanitation projects using water atlas	Prov: engineers, hydrogeo,	3	20	2	Norplan	Norplan/Dacaar	Prov	40 120 6
4.2	Conceptual design of water and sanitation services based on sustainabiity and affordability	Hydrogeologists/ Water engineers, Gov, consult students	3	20	2	Norplan/	Norpl/Daccar/ Univ	Univ	40 120 6
4.3	Planning and implementation of O&M for rural water supplies	National, Prov: engineers, hydrogeo,	3	20	2	Norplan	MRRD/Dacaar	MRRD	40 120 6
4.4	Assessment of water technology to use in ground water areas with potential saline waters.	Hydrogeologists/ Water engineers, Gov, consult students	1	30	2	Norplan	Uni/Dacaar	Univ	60 60 2
4.5	Social aspects of Water and Sanitation, WASH policy	National, Prov: engineers, technicians	1	15	2	Norplan/ MRRD	Norplan/Dacaar	MRRD/ DACAAR	30 30 2
4.6	Water supply network design using watercad and epanet.	Water engineers, design, Gov, consult students	3	10	3	Norplan	Noplan	MRRD	30 90 6
4.7	Training in use of total station for water/wastew. Network surveys	Water engineers, design, MRRD	4	5	1	Norplan	DACAAR	MRRD	5 20 8
4.8	Project management using MS project	Project managers / planners Water engineers, , MRRD	2	7	2	Norplan	Norplan/Dacaar	MRRD	14 28 4
<b>5 University training in Hydrogeology for sustained Afghan expertise</b>									
5.1	Candidates in BS and MSc with Major in Hydro Geology	Afghan students, bonded to work in sector	one to five	18 months			by application		
5.2	Candidates for Ph.D in Hydrogeology	Afghan sepcialis hydrogeologist(s) can apply for scholarship	one or two	40 months			by application		

No. course participants: 899  
Days courses 194

Revised, after comments from DB,