

The purpose of this survey is to provide information on the accumulation of salts in the subsoil in the semi-desert areas of the province.

The survey should be carried out as part of either the Rapid Well/Spring Survey or as part of the River Profile Survey. It should not be necessary to organise a separate sampling expedition solely for soils.

Eight locations should be sampled. The following suggested locations are tentative only – they are subject to access and security:

3 on Neogene deposits

- on east side of Shirin Tagab and south of Astana Valley around 36.122 N 64.939 E
- on east side of Shirin Tagab around 36.286 N 64.982 E
- to the south of Maimana around 35.823 N 64.737 E

3 on Quaternary alluvial deposits

- just south of Maimana (but not on agricultural or urban land) c. 35.889 N 64.777 E
- in the Shirin Tagab Valley, near Pata Taba, c. 36.558 N 64.910 E
- in the semi-desert area of Qaram Qul, c. 36.847 N 64.989 E

2 on loess deposits

- just NW of Maimana at around 35.944 N 64.705 E
- between Shirin Tagab and Maimana Rivers in northern part of Shirin Tagab district, e.g. around 36.305 N 64.836 E



These grid references should only be construed as highly indicative - we just want a spread between different subsoil geologies and locations in the catchments.

At each of the eight sites

- Security and possibility of mines should be assessed
- A trial pit should be excavated to around 70 cm by hand. On completion, the trial pit should be photographed. The soils encountered should be described and logged by a geologist.
- The trial pit should be in “natural soil” - i.e. away from main roads, agricultural land or town/urban areas or any source of human contamination.
- Two x 1.5 kg samples of soil should be taken from *around* 40 cm depth in the trial pit. The samples should always be taken from below any organic soil layer. The two samples should be taken from opposite sides of the trial pit.
- two x 1.5 kg samples of soil should be taken from *around* 70 cm depth in the trial pit. The samples should always be taken from below any organic soil layer and from opposite sides of the trial pit.
- During sampling, hand contact with the soils should be minimal. Samples should be taken from the wall of the pit using either (a) an stainless steel, unpainted trowel or spade, or a clean plastic trowel.

- In addition, if any salt horizon or hardpan horizon is encountered, a single sample should be taken.
- Samples should not be taken from below any water table.
- Each trial pit should be photographed and GPS coordinates taken.
- Four samples should thus be taken from each site. Each should be packed separately in geochemical grade strong brown bags / sealable polyethene bags or clean polythene sealable sample boxes.
- Samples should be clearly labelled with location, sample number, date, depth and sampler.
- The trial pit should be backfilled safely after sampling.
- Samples should be stored in the cool and dark and returned to DACAAR's Kabul laboratory for analysis as soon as possible.

LOCATION RECORDING SHEET FOR SOIL SURVEY POINTS

NORPLAN 		SOIL SALINITY SURVEY 2013	
		FARYAB PROVINCE	
District:	Village:	Location name (if any):	
Latitude/longitude (decimal):			
Approx. elevation (m asl)			
Land use:	e.g. urban, irrigated land, semi-desert		
Number of photographs			
Camera reference			
Date and time of photographs			
Soil samples Cm below ground level (bgl)	Sample reference:	Depth (cm bgl):	
	Sample reference:	Depth (cm bgl):	
	Sample reference:	Depth (cm bgl):	
	Sample reference:	Depth (cm bgl):	
Sketch and Description of soil profile	Column	Depth	Description
	 <div style="position: absolute; top: 0; right: 0;">0 cm</div> <div style="position: absolute; bottom: 0; right: 0;">70 cm</div>		
Recorded by:	Date:	Time:	
Name:			