

*Feasibility Study on Water Resources Development in
Rural Area in the
Kingdom of Morocco
Final Report
Volume VII Data Book
Data Book SO
Soil Survey*

SO2 Preliminary Soil Survey at N'Fifikh Site

**Preliminary Soil Survey between the Proposed N'Fifikh Dam Site
and N'Fifikh Upstream Area**

Profile No. 1 Location: See on the Map

- (1) Position: Alluvial soil
- (2) Land Form: Flat 0 – 2%
- (3) Land Use: Grape Tree
- (4) Groundwater Level: 4.5 - 5 m
- (5) Soil Classification: Sols peu evolues D'apport Alluvial
- (6) Land Suitability: Class I
- (7) Description of Soil Profile

Horizon	Depth (cm)	Description
A	0-22	7.5YR 4/4 moist, loam to silty loam, no mottle and concretion, subangular blocky with mmoderately strong and medium size (5-10cm), clear and smooth boundary
C1	22-44	7.5YR 3/4 moist, clay loam, no mottle and concretion, subangular blocky with moderately strong and medium size (5-10cm), clear and smooth boundary
C2	44 -	7.5YR 3/4 moist, clay loam, no mottle and concretion, subangular blocky with moderately strong and medium size (5-10cm))

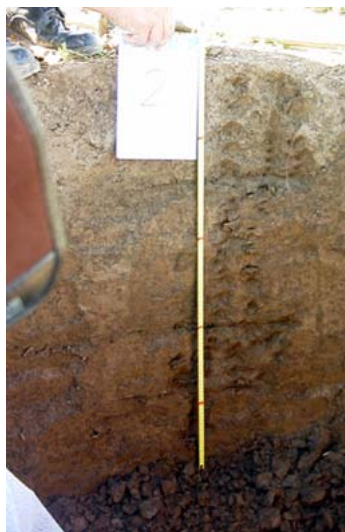


Photos
Profile No.1
(Left)
View of Location
(Right)
Soil Profile

Profile No. 2 Location:

- (1) Position: Alluvial soil
- (2) Land Form: Flat (Valley)
- (3) Land Use: Vegetable, irrigated area
- (4) Groundwater Level: 6 – 7m
- (5) Soil Classification: Sols peu evolues D'apport Alluvial
- (6) Land Suitability: Class I
- (7) Description of Soil Profile

Layer	Depth (cm)	Description
A1	0 – 23	10 YR 3/4 moist, clay loam, no mottle and concretion, sabangular blocky with weak structure and medium size (5-10 cm), clear and smooth boundary
C1	23 – 56	10 YR 4/4 moist, silty clay loam, no mottle and concretion, sabangular blocky with moderately strong structure and medium size (5-10 cm), gradual and smooth boundary
C2	56 – 72	10 YR 4/4 moist, silty loam, no mottle and concretion, sabangular blocky with weak structure and medium size (5-10 cm), diffusel and smooth boundary
C3	- 72	10 YR 4/4.5 moist, clay loam, no mottle and concretion, sabangular blocky with weak structure and fine size (less than 5 cm)



Photos
Profile No.2
(Left)
View of Location
(Right)
Soil Profile

Profile No. 3

Location:

- (1) Position: Colluvial soil, terrace
- (2) Land Form: gentle slope (2 – 5%)
- (3) Land Use: Wheat cultivation
- (4) Groundwater Level: no data
- (5) Soil Classification: Vertisols
- (6) Land Suitability: Class IV
- (7) Description of Soil Profile

Layer	Depth (cm)	Description
Ap	0 – 30	10 YR 2/2 moist, silty clay loam, few mottle with fine size and prominent contrast, no concretion, granular with weak structure and fine size (less than 10 cm), diffuse and broken boundary
C1	- 30	10 YR 2/2 moist, silty clay loam, many mottle (10RY 8/1) with fine size and prominent contrast, no concretion, Platy with strong structure and very coarse size (20 – 50 cm)



Photos
Profile No.3
(Left)
View of Location
(Right)
Soil Profile

Profile No. 4

Location:

- (1) Position: Alluvial soil
- (2) Land Form: Flat (0 – 2%)
- (3) Land Use: Wheat
- (4) Groundwater Level: 6.5 – 7m
- (5) Soil Classification: Sols peu evolues D'apport Alluvial
- (6) Land Suitability: Class I
- (7) Description of Soil Profile

Layer	Depth (cm)	Description
A1	0 – 28	10 YR 4/4 moist, clay loam, no mottle and concretion, subangular blocky with weak to moderately strong structure and fine size (less than 5 cm), clear and smooth boundary
C1	28 – 76	7.5 YR 4/4 moist, silty clay loam, no mottle and concretion, subangular blocky with moderate structure and fine size (± 5 cm), clear and wavy boundary
C2	- 76	7.5 YR 4/4 moist, silty loam, no mottle and concretion, subangular blocky with weak to moderately strong structure and fine size (± 5 cm)



Photos
Profile No.4
(Left)
View of Location
(Right)
Soil Profile

Profile No. 5

Location:

- (1) Position: Alluvial soil
- (2) Land Form: Flat (Valley)
- (3) Land Use: Vegetable
- (4) Groundwater Level: 6 m
- (5) Soil Classification: Sols peu evolues D'apport Alluvial
- (6) Land Suitability: Class II
- (7) Description of Soil Profile

Layer	Depth (cm)	Description
Ap	0 – 12	7.5 YR 3/3 moist, loa, , no mottle and concretion, subangular blocky with weak structure and fine size (\pm 5 cm), gradual and smooth boundary
C1	12 – 41	7.5 YR 4/4 moist, clay loam, no mottle and concretion, subangular blocky with moderately strong structure and medium size (5-10 cm), diffuse and smooth boundary
C2	- 41	7.5 YR 4/4 moist, clay loam, no mottle and concretion, subangular blocky with moderately strong to strong structure and medium size (5-10 cm)



Photos
Profile No.5
(Left)
View of Location
(Right)
Soil Profile

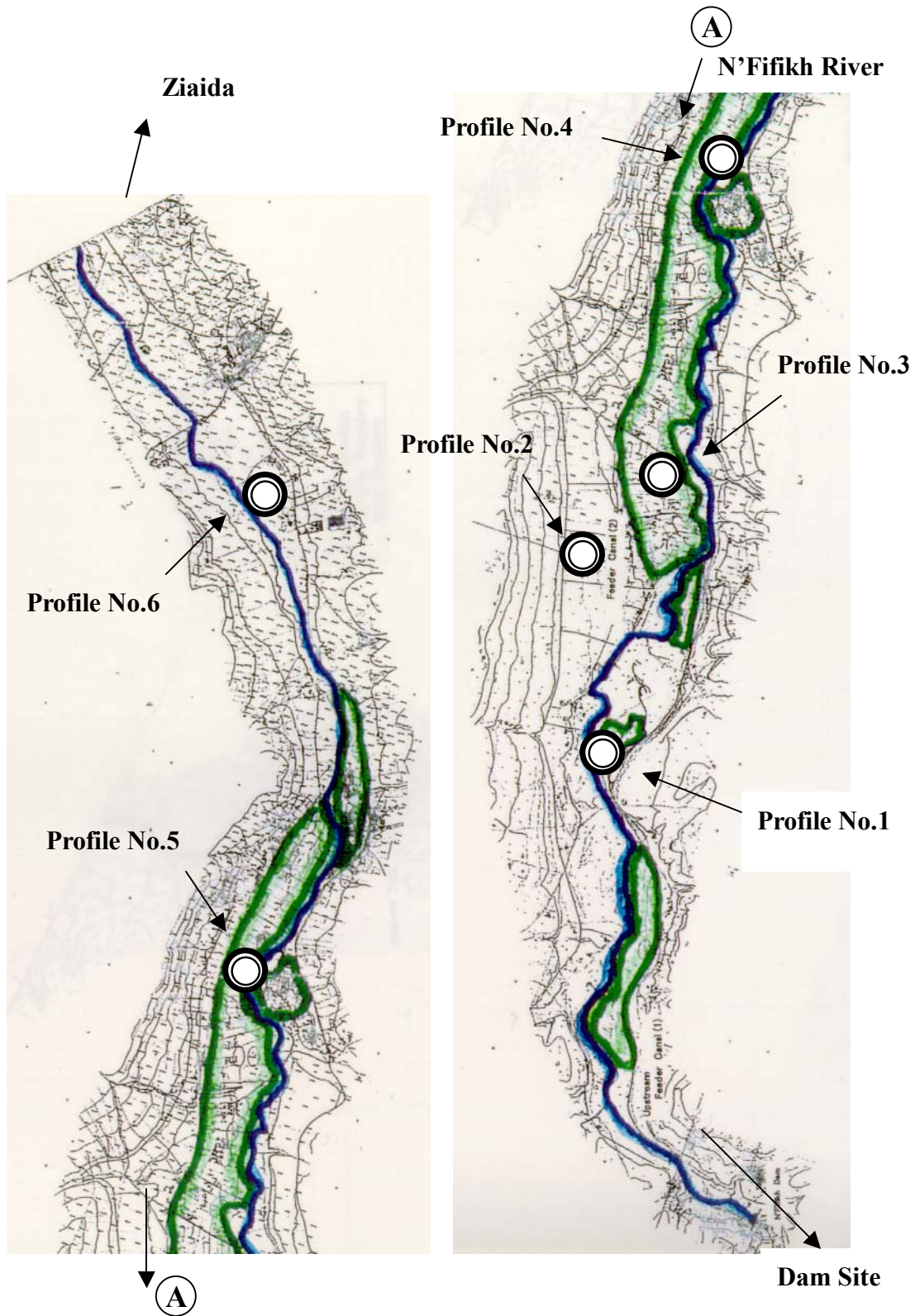
Profile No. 6 Location: Near Ziaida Village

- (1) Position: Alluvial soil
- (2) Land Form: Flat (0 – 2%)
- (3) Land Use: wheat
- (4) Groundwater Level: 8 m
- (5) Soil Classification: Sols peu evolues D’apport Alluvial
- (6) Land Suitability: Class I
- (7) Description of Soil Profile

Layer	Depth (cm)	Description
Ap	0 – 10	7.5 YR 4/4 moist, loam, no mottle and concretion, subangular blocky with weak to weak structure and fine size (less than 5 cm), clear and smooth boundary
	10 – 34	7.5 YR 4/4 moist, silty loam, no mottle and concretion, subangular blocky with moderately strong structure and fine size (less than 5 cm), gradual and smooth boundary
	34 – 58	7.5 YR 4/3 moist, silty loam, few mottle with fine size and faint contrast, no concretion, subangular blocky with moderately strong structure and fine size (less than 5 cm), diffuse and smooth boundary
	- 58	7.5 YR 4/3 moist, clay loam, no mottle and concretion, subangular blocky with strong structure and medium size (5-10 cm)



Photos
 Profile No.6
 (Left)
 View of Location
 (Right)
 Soil Profile



The Location of Preliminary Soil Survey in N7Fifikh Upstream Area