

Village Level Community: Land User Characterization

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With assistance provided by

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The purpose of this component is to:

- **assess household resources, production strategies and income in order to identify different categories of household based on those factors. This will enable us to determine the constraints to the adoption of potential changes in land use and the costs and benefits of these changes to different farm households.**

Methodology

- **Group discussion**
- **A questionnaire (check-list) was developed to collect the data on communities level.**
- **A rapid rural appraisal was carried out in all the villages at the project area.**
- **Data analysis was conducted and focused on**
 - **descriptive analysis and**
 - **cluster analysis.**

The baseline data collected were:

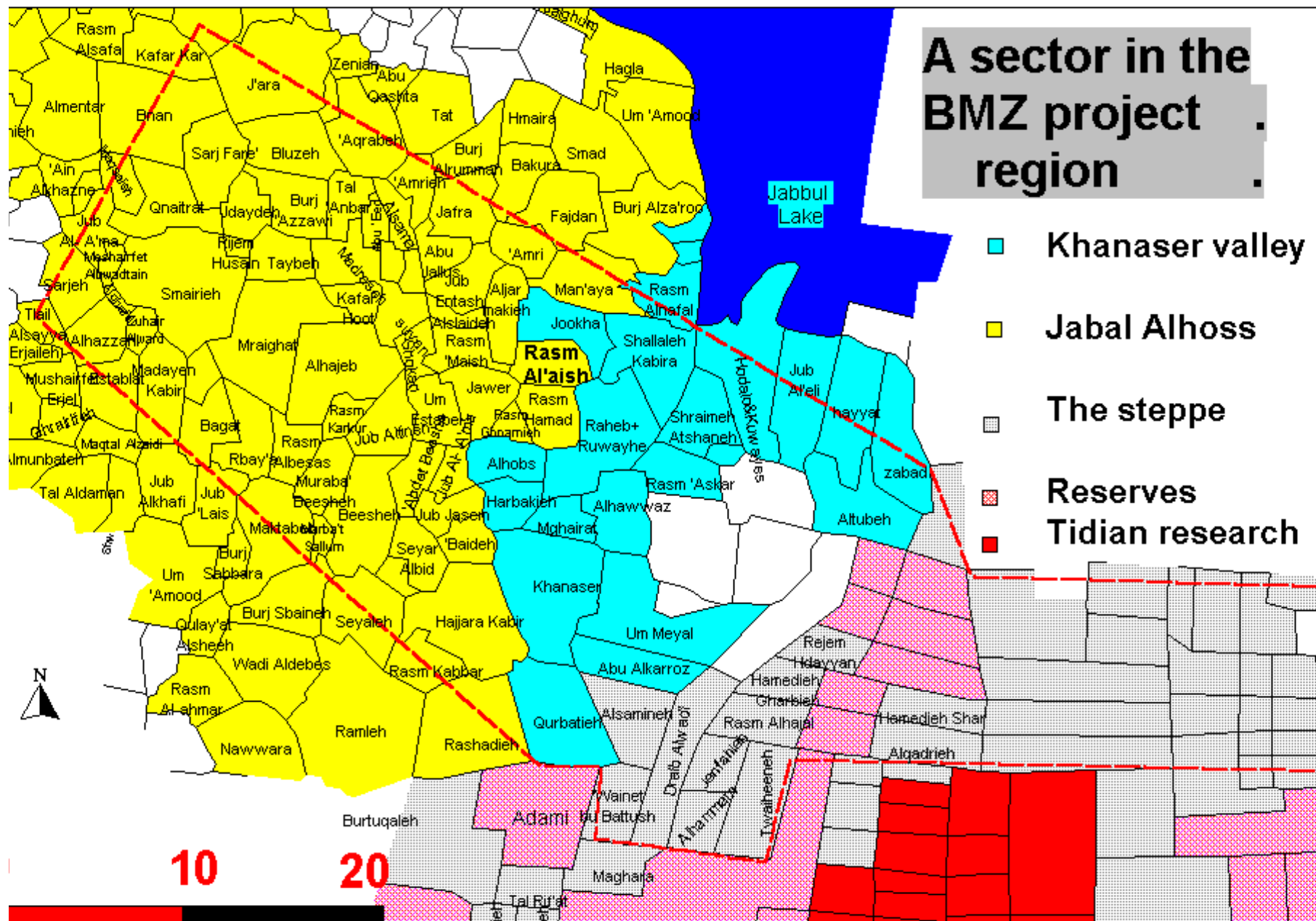
- **General information on the village/community**
- **People**
- **Drinking water**
- **The situation of well-being categories of households**
- **Off-farm activities**
- **Education**
- **Land resources and ownership**
- **Land use**
- **Land degradation**
- **Irrigation resources**
- **Livestock**
- **Cropping pattern and yields obtained by farmers**
- **Factors that negatively affect productivity of crops and livestock,**
- **Housing**
- **New agricultural technologies introduced during the last ten years**
- **Activities which the community does collectively.**

Fifty-eight villages were included in the rapid rural appraisal

- **31 villages located in Khanasser valley**
- **16 villages in Jabel El-Hoss**
- **11 villages were in *Badia* (Steppe area).**

The villages outside Khanasser valley, which were included in the survey are administratively connected to Khanasser sub-district.

A sector in the BMZ project region



Some preliminary results

Population

Location		Population			Household		
		Total	Residence	Non-residence	Total	Staying in the villages	Outside the villages
Wadi Khanaser	Sum	24016	17661	6465	2525	1814	711
	Mean	775	570	209	81	59	2
Jabel El-hoss	Sum	9707	7202	2505	1287	802	485
	Mean	607	450	157	80	50	30
Badia	Sum	3410	2505	975	993	283	710
	Mean	341	250	98	90	26	64
Total	Sum	37133	27368	9945	4805	2899	1906
	Mean	651	472	174	83	50	33

Estimated of average percentages of households by poverty categories

Location		% Very poor household	% Poor household	% Moderate household	% Well-off household
Khanasser Valley	Mean	13.2	47.4	33.3	6.1
	Std. Deviation	13.1	26.6	26.8	10.6
Jabel El-Hoss	Mean	13.5	50.5	29.4	6.7
	Std. Deviation	20.6	26.1	26.5	11.2
Badia	Mean	7.0	51.4	33.2	8.2
	Std. Deviation	14.5	21.7	17.9	12.5
Total	Mean	12.3	48.9	32.2	6.6
	Std. Deviation	15.6	25.4	25.2	10.9

There were variations among farmers in the definition of poverty, for example:

- a very poor household described by communities in Khanasser by several ways such as: had no sheep, had debt, work for bread, ask others for help, sick and no ability to work, small rainfed land holder (2-3 ha), landless, or had no family labors.**

- For poor household, it was described as: had small number of sheep (1-5 heads), had one of his family members work as non-agriculture labor, had no capital cash, owned small rainfed land (2-5 ha), had little chance to work as off-farm labor.**

Location	% Household without land	% Household working as sharecropper
Wadi Khanaser	15	5
Jabel El-hoss	20	3
Badia	5	1
Total	15	4

Location		No. of household working as off-farm labor wage	No. of household working as labor in cities	No. of household working outside Syria
Wadi Khanaser	Sum	1339	512	327
	Mean	43	17	11
Jabel El-hoss	Sum	395	184	332
	Mean	25	12	21
Badia	Sum	353	22	134
	Mean	32	2	12
Total	Sum	2087	718	793
	Mean	36	12	14

Machinery ownership (Number of farmers)

Location		Car	Pick-up	Lorry	Motorcycle	Tractor	Micro-bus
Wadi Khanaser	Sum	2	13	19	67	119	2
	Mean	.06	.42	.61	2.16	3.84	.06
Jabel El-hoss	Sum	0	7	5	19	26	2
	Mean	.00	.44	.31	1.19	1.63	.13
Badia	Sum	0	2	9	5	40	0
	Mean	.00	.18	.82	.45	3.64	.00
Total	Sum	2	22	33	91	185	4
	Mean	.03	.38	.57	1.57	3.19	.07

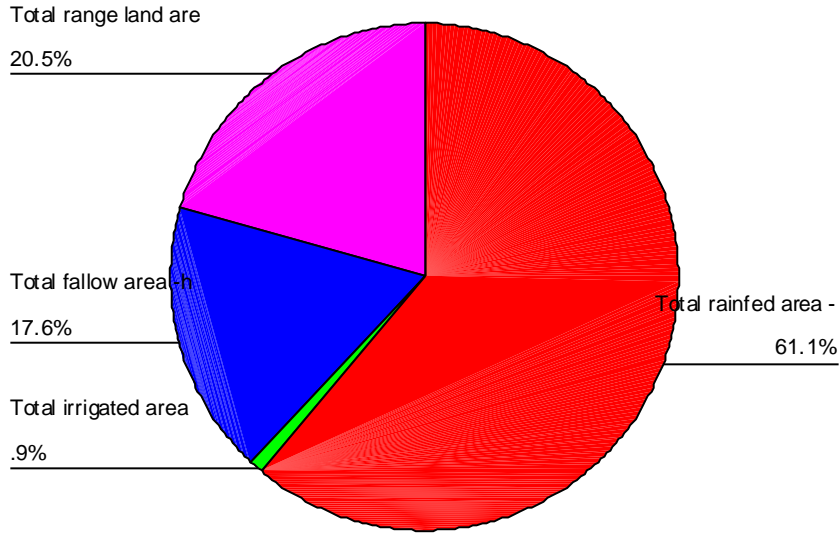
Source of drinking water

Location	Public water point	Public well in the village	Private well	Private Sahrij	Collected rainfall
<u>Winter time (%)</u>					
Wadi Khanaser	69.52	1.94	21.77	1.61	5.16
Jabel El-hoss	8.13	20.00	35.94	35.94	.00
Badia	44.73	4.55	44.36	5.45	.00
Total	47.88	7.41	29.97	11.81	2.76
<u>Summer time (%)</u>					
Wadi Khanaser	70.16	1.29	22.10	.00	6.45
Jabel El-hoss	12.50	23.12	64.38	.00	.00
Badia	49.27	4.55	46.18	.00	.00
Total	50.29	7.93	38.33	.00	3.45

Public water point

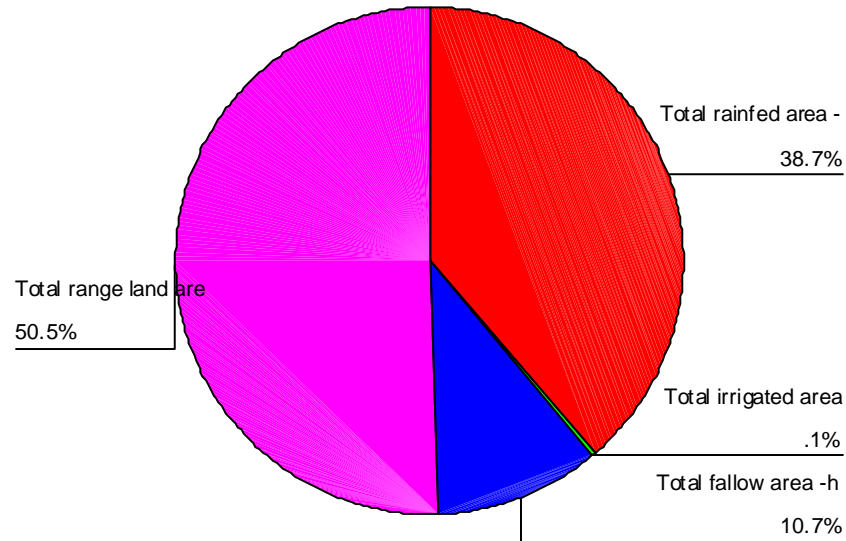
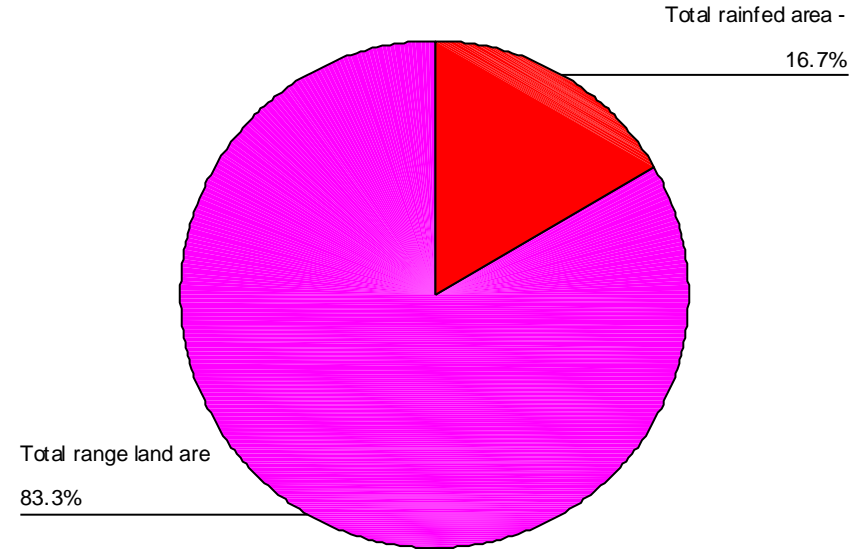


Khanasser Valley



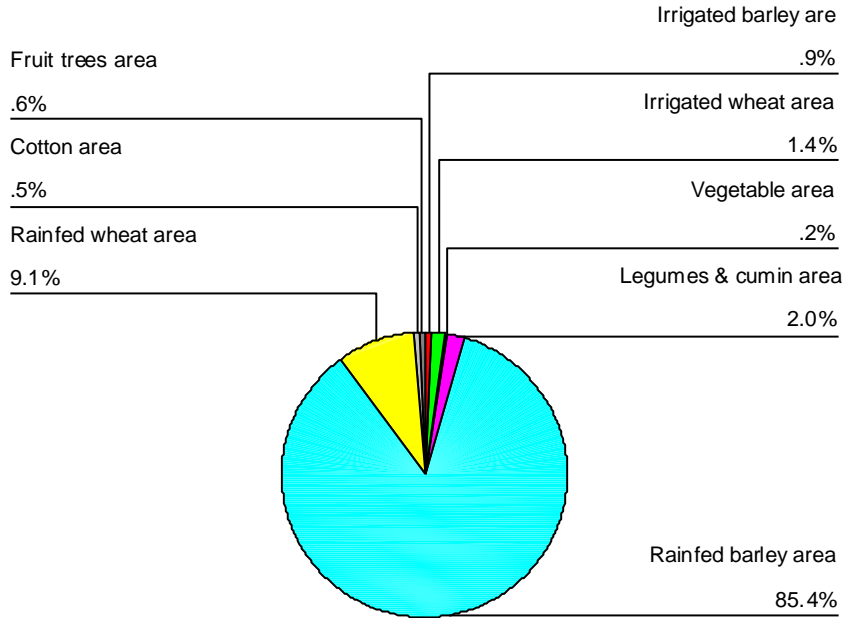
Land Use

Baddiah

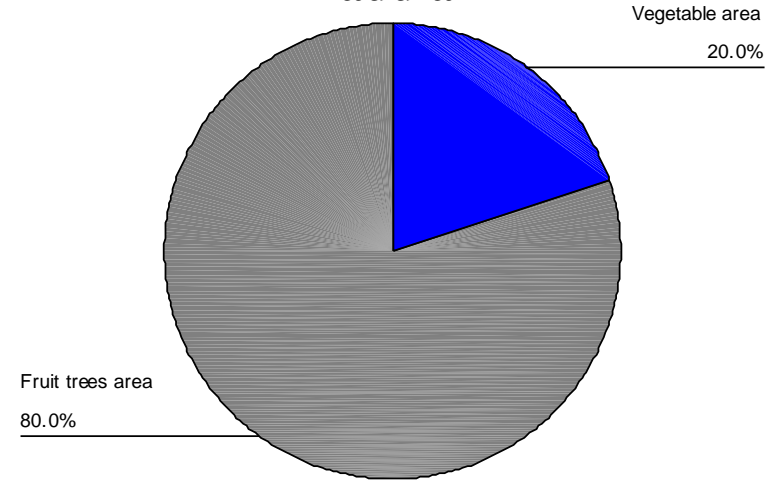


Cropping Pattern

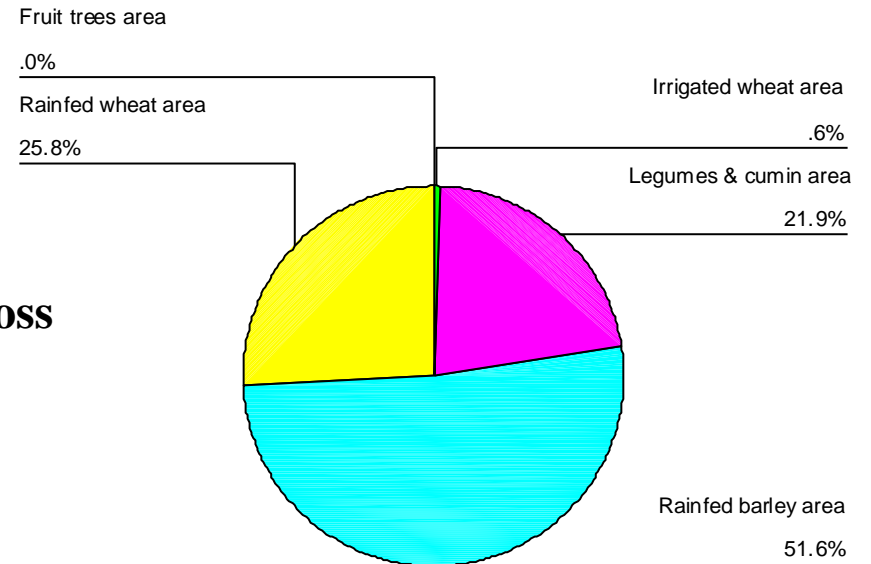
Khanasser Valley



Baddiah



Jabal El Hoss



Minimum yield of rainfed barley

		Location			Total
Kg/ha		Wadi Khanaser	Jabel El-hoss	Badia	
.00	Count	30	13	1	44
	%	100.0%	81.3%	100.0%	93.6%
400.00	Count		1		1
	%		6.3%		2.1%
500.00	Count		1		1
	%		6.3%		2.1%
1000.00	Count		1		1
	%		6.3%		2.1%
	Count	30	16	1	47
	%	100.0%	100.0%	100.0%	100.0%

Maximum yield of rainfed barley (kg/ha)

		Location			Total
Kg/ha		Wadi Khanaser	Jabel El-hoss	Badia	
.00	Count	21	4	1	26
	%	70.0%	25.0%	100.0%	55.3%
200.00	Count	4			4
	%	13.3%			8.5%
300.00	Count	3			3
	%	10.0%			6.4%
500.00	Count	1			1
	%	3.3%			2.1%
600.00	Count	1			1
	%	3.3%			2.1%
1000.00	Count		2		2
	%		12.5%		4.3%
1500.00	Count		5		5
	%		31.3%		10.6%
1600.00	Count		1		1
	%		6.3%		2.1%
2000.00	Count		2		2
	%		12.5%		4.3%
2500.00	Count		2		2
	%		12.5%		4.3%
Total	Count	30	16	1	47
	%	100.0%	100.0%	100.0%	100.0%

Main factors affecting crop productivity reported by communities in Khanasser
(% of communities)

Factor	%
Drought	72
Crop rotation	30
Fertilizer use	24
Credit availability	10
Land preparation	8
Varieties	8
Weeds	3

**Main factors affecting livestock productivity reported by communities in Khanasser
(% of communities)**

Factor	%
Availability of rangeland	62
Drought	53
Diseases and shortage of vet. vaccinations	50
Shortage of money (credit availability)	31

Community opinion on atriplex ally cropping with barley

		Location			Total
		Wadi Khanaser	Jabel El-hoss	Badia	
Acceptance	Count	2	1	4	7
	%	10.5%	6.3%	44.4%	15.9%
Not acceptance	Count	13	15	4	32
	%	68.4%	93.8%	44.4%	72.7%
Not known	Count	4		1	5
	%	21.1%		11.1%	11.4%
Total	Count	19	16	9	44
	%	100.0%	100.0%	100.0%	100.0%

Community opinion on olives and other fruit trees

		Location			Total
		Wadi Khanaser	Jabel El-hoss	Badia	
Acceptance when irrigation is available	Count	14	13	4	31
	%	73.7%	81.3%	57.1%	73.8%
Not acceptance	Count	5	2	2	9
	%	26.3%	12.5%	28.6%	21.4%
Not known	Count		1	1	2
	%		6.3%	14.3%	4.8%
Total	Count	19	16	7	42
	%	100.0%	100.0%	100.0%	100.0%

Community opinion on new barley varieties

		Location			Total
		Wadi Khanaser	Jabel El-hoss	Badia	
Acceptance	Count	10	2		12
	%	52.6%	12.5%		31.6%
Not acceptance	Count	7	11	2	20
	%	36.8%	68.8%	66.7%	52.6%
Not known	Count	2	3	1	6
	%	10.5%	18.8%	33.3%	15.8%
Total	Count	19	16	3	38
	%	100.0%	100.0%	100.0%	100.0%

Community opinion on using P fertilizer on rainfed barley

		Location			Total
		Wadi Khanaser	Jabel El-hoss	Badia	
Acceptance in wet conditions	Count	12	13	1	26
	%	63.2%	81.3%	33.3%	68.4%
Not acceptance in dry conditions	Count	4	2		6
	%	21.1%	12.5%		15.8%
Not known or tried before	Count	3	1	2	6
	%	15.8%	6.3%	66.7%	15.8%
Total	Count	19	16	3	38
	%	100.0%	100.0%	100.0%	100.0%

Community opinion on using N fertilizer on rainfed barley

		Location			Total
		Wadi Khanaser	Jabel El-hoss	Badia	
Acceptance in wet conditions	Count	10	11	2	23
	%	52.6%	78.6%	66.7%	63.9%
Not acceptance in dry conditions	Count	7	1		8
	%	36.8%	7.1%		22.2%
Not known or tried before	Count	2	2	1	5
	%	10.5%	14.3%	33.3%	13.9%
Total	Count	19	14	3	36
	%	100.0%	100.0%	100.0%	100.0%

Collective activities in the community

		Location			Total
		Wadi Khanaser	Jabel El-hoss	Badia	
Yes	Count	17	3		20
	%	54.8%	18.8%		35.7%
No	Count	14	13	9	36
	%	45.2%	81.3%	100.0%	64.3%
Total	Count	31	16	9	56
	%	100.0%	100.0%	100.0%	100.0%

Land degradation noticed by communities
(% of communities)

Type of degradation	Positive reply	Degree of erosion			
		Light	Moderate	Strong	Very strong
Erosion by water	26	19	2	3	2
Erosion by wind	9	9	-	-	-
Soil fertility decline	10	2	3	3	-
Soil salanization	16	10	2	2	2

Final Cluster

	Cluster		
	1	2	3
Road type	1	2	1
Percentage of households had electricity	81	27	76
% poor household	47.25	42.93	53.08
% moderate household	37.00	40.67	22.92
No. of household working as off-farm labor wage	22.25	17.60	82.17
No. of household working as labor in cities	15.25	10.00	25.08
No. of household working outside Syria	5.00	6.07	18.00
no. of farmers owning a tractor	5	2	5
Availability of elementary school in the village	2	2	1
Total village area -ha-	1737.50	260.67	665.00
Total range land area -ha-	637.50	51.13	128.58
Total irrigated area -ha-	7.50	5.53	8.17
no. of farmers having house garden	9.75	.87	20.92
no. of farmers working in sheep fattening	2	6	16
Soil salinization	1.00	1.91	1.71
Erosion by water	1	1	2
Erosion by wind	1.0	1.8	1.9
Soil fertility decline	2.00	1.82	1.71

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Total village area -ha-	1737.50	260.67	665.00
Total range land area -ha-	637.50	51.13	128.58
Total irrigated area -ha-	7.50	5.53	8.17
no. of farmers having house garden	9.75	.87	20.92
no. of farmers working in sheep fattening	2	6	16
Soil salinization	1.00	1.91	1.71
Erosion by water	1	1	2
Erosion by wind	1.0	1.8	1.9
Soil fertility decline	2.00	1.82	1.71

Number of communities in each Cluster

Cluster	No
1	4
2	15
<u>3</u>	<u>12</u>
Total	31

What Next ?