

LIFE Integrated Projects 2016

Optimising the implementation of the 2nd RBMP in the Malta River Basin District

LIFE 16 IPE MT 008



Action A.4:

Stakeholder Assessment and Perception Survey

Results of the Agriculture Stakeholder Perception Survey on the Development of the Water Sector in the Maltese Islands

Water Survey - Agriculture

SURVEY UNDERTAKEN IN NOVEMBER 2019

GENERAL INFORMATION

Target population of this survey consisted of those agricultural holdings involved in crop cultivation, livestock farming and mixed farming. Total population for this survey consisted of 9,557 holdings residing in the Maltese Islands. Those holdings that cultivated only fodder and/or the agricultural area was set-aside, together with the wineries were not included in the population.

From the survey, it resulted that most of the agricultural holdings operate in crop husbandry (82.1 per cent) followed by livestock farming (14.6 per cent) and mixed farming (3.4 per cent). Farming in the Maltese Islands is generally undertaken by sole holders (87.6 per cent), while only 0.6 per cent form part of a company.

Table1. Holdings' main activity

Main Activity	Number of holdings	%
Crop Husbandry	7,843	82.1
Livestock Farming	1,391	14.6
Mixed farming	323	3.4
Total	9,557	100.0

Table 1. Holdings' legal economic responsibility

Legal Economic Responsibility on Holding	Number of holdings	%
Sole owner	8,371	87.6
Partnership	1,132	11.8
Part of a company	53	.6
Total	9,557	100.0

AGRICULTURAL LAND

The following data refer to those agricultural holdings, 8,166 in total, who are engaged in crop husbandry or mixed farming (crops and livestock).

An analysis of the land area shows that 65.0 per cent of the agricultural holdings who are engaged in cultivation of crops had less than 10 tumoli of utilised agricultural area (UAA), while only 1.3 per cent of these holdings had over 100 tumoli of UAA.

Table 2: Land area in tumoli

Area in tumoli	Number of holdings	%
No reply to this question	18	0.2
<1	360	4.4
1 < 5	3,271	40.1
5 < 10	1,670	20.5
10 < 20	1,252	15.3
20 < 30	655	8.0
30 < 50	471	5.8
50 <100	366	4.5
> 100	103	1.3
Total	8,166	100.0

3,500 3,000 2,500 2,000 1,500 1,000 500 <1 1 < 5 5 < 10 10 < 20 20 < 30 30 < 50 50 < 100 > 100 area size classes

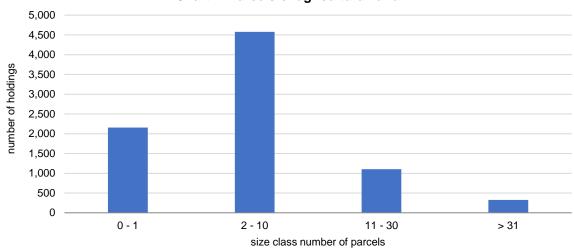
Chart 1. Land area in tumoli

It also resulted that the majority of the agricultural holdings, over 55.0 per cent, had between two and ten land parcels while only 327 holdings or 4.0 per cent had more than 31 parcels.

Table 3: Holders' parcels of agricultural land

Parcels classes	Number of holdings	%
Missing	3	0.0
0 - 1	2,155	26.4
2 - 10	4,579	56.1
11 - 30	1,102	13.5
> 31	327	4.0
Total	8,166	100.0

Chart 2. Parcels of agricultural land



Crops grown on agricultural land

From the data collected, it resulted that 61.1 per cent of the holdings' cultivated crops for their own consumption (kitchen gardens) while the holdings' responses also showed that 41.4 per cent cultivated fodder.

Chart 3. Crops grown Other Fallow Land crops grown Kitchen Garden Fodder Vegetables Permanent Crops 0 1,000 2,000 3,000 4,000 5,000 6,000 responses

A total of 594 holdings or 7.3 per cent had a greenhouse on their agricultural land.

Table 4: Greenhouses

Land Halding Includes Creenbayees	Н	olders' Main Activity	
Land Holding Includes Greenhouses	Crop husbandry	Mixed farming	Total
Yes	572	22	594
No	7,271	301	7,573
Total	7,843	323	8,166

Crops requiring most water

The analysis regarding use of water on crops grown, shows that the response given by the 8,166 holdings engaged in crop cultivation, 20.3 per cent of the responses indicated that they considered tomatoes as the crop which needs most water followed by cabbages, 15.4 per cent.

Chart 4. Cultivated crops requiring most water Carrots Cabbages **Tomatoes** Lettuce Cucumbers Sugarmelon Watermelon 200 400 600 1,000 1,200 1,400 1,600 1,800 number of responses

Irrigation method consuming most water and monitoring of water usage

Analysis of the responses showed that 31.0 per cent of the responses perceive surface irrigation as the irrigation method which consumes most water. On the other hand, only 0.4 per cent think that hydroponics method consumes most water. Moreover, 10.7 per cent have no knowledge regarding which system consumes most water.

Do not know
Other
Hydroponics
Surface Irrigation
Sprinklers
Drip Irrigation
0 500 1,000 1,500 2,000 2,500 3,000

Chart 5. Irrigation method consuming most water

When asked about monitoring of agricultural water usage on farm, only 32.6 per cent declared that they do so. The highest methods used for controlling the irrigation system is the manually using tap (36.1 per cent), followed by the time clock irrigation system (11.0 per cent).

number of responses

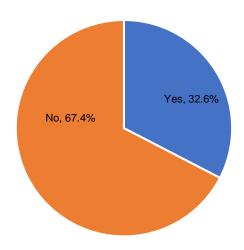


Chart 6. Monitoring of agricultural water usage in farm

No irrigation system

Other

Rain sensors

Soil moisture controllers/sensors

Water flowmeters

Manually using tap

0 500 1,000 1,500 2,000 2,500 3,000 3,500 number of responses

Chart 7. Method of controlling irrigation system

'New water' usage for irrigation

Data collected showed that the majority of holdings, 93.9 per cent do not use 'new water' for agriculture irrigation.

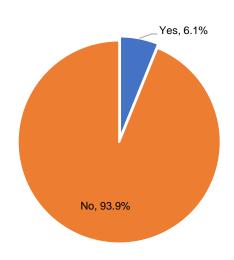


Chart 8. Use of New Water

However, 57.0 per cent of the responses claimed that they do not use it because it is not available in their area. Additionally, a further 21.9 per cent said that they had never heard of 'new water'. When asked if they perceive 'new water' of lesser quality, only 9.0 per cent of those who do not make use of this water replied in the affirmative.

Moreover, amongst these holders, only 1.2 per cent think that customers do not trust fruits and vegetables irrigated with 'new water'. (Questions 12 and 13 in the questionnaire).

LIVESTOCK

The following data refer to those agricultural holdings, 1,714 in total who were engaged in livestock farming or mixed farming (crops and livestock).

Water source for livestock

It resulted that 51.7 per cent of the responses used the municipal mains water as the main source for drinking for livestock. This was followed by rainwater and ground water with 26.7 per cent and 26.4 per cent respectively.

Regarding the source of water used to wash the animals, the municipal mains water was the main source selected with 31.7 per cent followed by groundwater and rainwater with 24.4 and 23.1 per cent respectively.

When asked about the source of water used to clean the premises, 36.6 per cent of the responses indicated that they use municipal mains water for this activity. Rainwater and groundwater followed by 30.9 per cent and 27.6 per cent respectively.

When analysing these three questions together it is evident that municipal mains water is the source which is mostly used for the three farm duties reviewed in this survey. Rainwater and groundwater are the sources of water which are used by a significant number of holdings also when undertaking these farm duties.

Chart 9. Use of water 1,000 900 800 number of responses 700 600 500 400 300 200 100 Municipal mains water Rainwater Other Groundwater Bowser source of water Livestock drinking ■ Wash animals ■ Cleaning premises

Data collection showed that most of the holdings having livestock, 65.9 per cent do not monitor water usage consumption for animals.

28.9%

5.2%

Yes, I monitor the overall livestock usage

Yes, I monitor the consumption of specific animals

No

Chart 10. Monitoring of water usage for livestock

WATER USAGE

The following data refer to all the holdings in the population, 9,557, irrespective of their area of engagement.

Availability of reservoirs

The analysis of data regarding availability of reservoirs showed that almost half of the holdings had a reservoir available on their land. Amongst those who have a reservoir,

75.5 per cent have one reservoir while 2.0 per cent have five reservoirs. Further analysis indicates that holdings who engage in crop husbandry have the highest availability, as 77.2 per cent have a reservoir available, while only 22.8 per cent of those engaged in livestock faming or mixed activity answered in the affirmative (Question 19 in the questionnaire). Further analysis regarding volume, dimensions and year which these reservoirs were built could not be carried out, as a substantial number of respondents did not answer these questions. Moreover, there were many inconsistencies in the data which was collected.

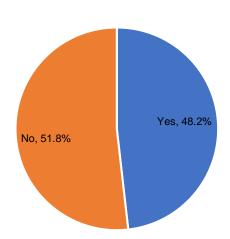


Chart 11. Availability of reservoir

Table 5: Availability of reservoir by type of engagement

Availability of	Holding	s' Main Activit	у	Number of	
reservoir on land holding	Crop husbandry	Livestock farming	Mixed farming	holdings	Percent
Yes	3,555	858	193	4,607	48.2
No	4,288	533	129	4,950	51.8
Total	7,843	1,391	323	9,557	100.0

Moreover, 1,191 holdings would consider building further reservoirs. Indeed, 72.0 per cent, 28.0 per cent of holdings who were engaged in crop husbandry, livestock farming, and mixed farming respectively answered favourably when asked if they would consider building further reservoirs. Amongst these 1,191 holdings, 994 or 83.4 per cent indicated that they were willing to add a reservoir if subsidies were available and a further 149 holdings or 12.5 per cent are willing to pay themselves for an additional reservoir.

Table 6: Consider building further reservoirs

Consider	Holding	s' Main Activity	у	Number of	
building further reservoirs	Crop husbandry	Livestock farming	Mixed farming	holdings	%
Yes	858	273	61	1,191	25.9
No	2,698	585	133	3,415	74.1
Total	3,555	858	193	4,607	100.0

Table 7: Willing to pay for additional reservoirs

Willing to pay for	Hold	ings' Main Acti	vity	Number of	
additional reservoirs	Crop husbandry	Livestock farming	Mixed farming	holdings	%
Yes, I am willing to pay for it/them from my own pocket	125	13	11	149	12.5
Yes, on the condition that a subsidy/grant is available	697	247	50	994	83.4
I am not willing to pay for it/them	36	13	0	49	4.1
Total	858	273	61	1,191	100.0

Private groundwater supply

A total of 3,883 holdings or 40.6 per cent have private groundwater supply. In addition, 77.0 per cent of the responses use electricity to pump groundwater to the surface, while only 2.4 per cent are still using the windmill.

Chart 12. Availability of private groundwater supply

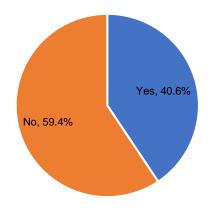


Chart 13. Type of energy used to pump groundwater

3,500

3,000

2,500

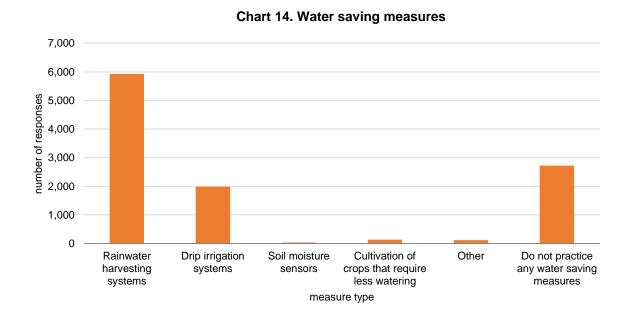
1,500

500

Electricity Fuel or generator Windmill Other type of energy

Water saving measures

Holdings were also asked whether they practise any water saving measures on the farm. The majority of the holdings, 6,829 or 71.5 per cent practice some sort of water saving measure. Out of the 8,204 responses given by these holdings, the most popular measure was the rainwater harvesting with 62.0 per cent of the responses. On the other hand, those holdings that do not practice any water saving measures amounted to 2,728 holding or 28.5 per cent of the total holdings.



An additional question regarding the willingness to invest in other water saving measures in the near future revealed that 60.2 per cent of the holders replied in the negative. Albeit this, 3.0 per cent of the holdings declared that they were willing to invest in other water saving measures even at their own expense. A further 36.6 per cent indicated that they would be willing to invest in other water saving measures if the expense was to be subsidised or if grants were available.

3.0%
36.6%

Yes, I am willing to pay for them from my own pocket
Yes, on the condition that a subsidy/grant is available
No

Chart 15. Willing to invest in other water saving measures

Questionnaire – English Version

SURVEY ON PATTERNS OF WATER USE IN AGRICULTURE

This is <<name>> calling from the National Statistics Office. The office is currently carrying out a survey among key stakeholders regarding water supply and household water consumption patterns. The survey is being carried out on behalf of the Energy and Water Agency.

Your agricultural enterprise was randomly selected to participate in this survey which takes about 10 minutes to complete. May I kindly speak to the person that can give me the most accurate information on water consumption within your enterprise?

The information collected will remain confidential and will only be used for statistical purposes.

Is anyone within your household responsible for an agricultural holding? Yes/No

 $\begin{array}{c|c} \text{1.} & \text{What is your legal and economic responsibility on the holding? (\it Tick one circle only)} \\ & Sole owner & O_1 \\ \hline & Partnership & O_2 \\ \hline & Part of a company & O_3 \\ \end{array}$

Table 2 in the report.

2. What is your main activity? (Tick one circle only)

Crop husbandry	O ₁
Livestock farming	$O_2 \rightarrow$ Go to question 14
Both of the above	O ₃

Table 1 in the report.

Agriculture

3. What is the total size/area of the workable land? (Specify total size/area, both if it is rented or owned)

Chart 1 and Table 3 in the report.

4.	How many parcels of land do you own or work? (Specify	number of parcels)
Chart 2	2 and Table 4 in the report.	
5.	What do you grow on your agricultural land? (Tick all the	at apply)
	Permanent crops (including fruit trees and vines)	1
	Vegetables (including strawberries, sugar melon and watermelon)	
	Fodder	□3
	Kitchen gardens (areas in which crops are grown for own consumption by holding)	
	Fallow land	5
	Other (specify)	6
-	Does the land holding include greenhouses? (Tick one ci	1
	No	01
Table 5	5 in the report.	O ₂
7.	Which of the cultivated crops on your land holding re-	quire the most water? <i>(Tick all</i>
	apply)	
	Watermelon	□ 1
	Sugar melon	2
	Cucumbers	3
	Lettuce	4
	Tomatoes	5
	Cabbages	6
	Carrots	7
	Other (specify)	_ 🔲 8

Chart 4 in the report.

	Drip irrigation	□1
	Sprinklers	
	Rain guns	3
	Surface irrigation	
	Hydroponics	
	Other (specify)	6
	I do not know	0,
	in the report. How do you control your irrigation system? (Tick all	that apply)
	Manually using a tap	□1
	Water flowmeters	 2
	Time clock irrigation	3
	Soil moisture controllers/sensors	4
	Rain sensor	 5
	Other (specify)	6
	I do not have any irrigation systems	07
	in the report. Do you monitor the agricultural water usage in your Yes No	farm? (Tick one circle only) O ₁ O ₂
10. nart 6	Do you monitor the agricultural water usage in your	O_1 O_2 d water produced from the tr
10. nart 6	Do you monitor the agricultural water usage in your Yes No in the report. Do you use 'New Water' (highly polished reclaiments)	O_1 O_2 d water produced from the tr

Chart 8 in the report.

Lesser quality	$\square_1 \rightarrow$ Go to question 14
Lack of availability in my area	☐ ₂ → Go to question 14
Customers do not trust fruits and vegetables irrigated	☐3→ Go to question 14
with 'New Water'	
Never heard of the term 'New Water'	O_4 \rightarrow Go to question 14
13. Do you think that 'New Water' is of a lesser quality w sources of water you currently use? (Tick one circle only,	-
Yes	O ₁
No	O ₂
estions 14 to 17 apply only if Question 2=2 or Question	
mal Husbandry estions 14 to 17 apply only if Question 2=2 or Question 14. What source of water do you use for livestock drinking?	(Tick all that apply)
2stions 14 to 17 apply only if Question 2=2 or Question 14. What source of water do you use for livestock drinking? Municipal mains water	(Tick all that apply)
estions 14 to 17 apply only if Question 2=2 or Question 14. What source of water do you use for livestock drinking?	(Tick all that apply)
Estions 14 to 17 apply only if Question 2=2 or Question 14. What source of water do you use for livestock drinking? Municipal mains water Groundwater Bowser	(Tick all that apply)
25tions 14 to 17 apply only if Question 2=2 or Question 14. What source of water do you use for livestock drinking? Municipal mains water Groundwater Bowser Rainwater	(Tick all that apply)
25tions 14 to 17 apply only if Question 2=2 or Question 14. What source of water do you use for livestock drinking? Municipal mains water Groundwater Bowser	(Tick all that apply)
2. Stions 14 to 17 apply only if Question 2=2 or Question 14. What source of water do you use for livestock drinking? Municipal mains water Groundwater Bowser Rainwater	(Tick all that apply)
Aunicipal mains water Groundwater Bowser Rainwater Other (specify) Trt 9 in the report.	(Tick all that apply)
Aunicipal mains water Groundwater Bowser Rainwater Other (specify) The specific of water do you use to wash the animals? (specific of water do you use to wash the water do you use to wash the animals? (specific of water do you use to wash the water do you use	(Tick all that apply)
Municipal mains water Other (specify) The source of water do you use to wash the animals? Municipal mains water Bowser Rainwater Other (specify) The source of water do you use to wash the animals? (Municipal mains water)	(Tick all that apply)
Aunicipal mains water Other (specify) The source of water do you use to wash the animals? Municipal mains water Bowser Rainwater Other (specify) The report. Municipal mains water do you use to wash the animals? Municipal mains water Groundwater The source of water do you use to wash the animals?	(Tick all that apply)

Chart 9 in the report.

Groundwater Bowser Rainwater Other (specify) 17. Do you monitor water usage for livestock consumption in your farm? (Tick one circle of the consumption of specific animals of the consumption of specific anima	Municipal mains water	
Bowser Rainwater Other (specify) 17. Do you monitor water usage for livestock consumption in your farm? (Tick one circle Yes, I monitor the overall livestock usage Yes, I monitor the consumption of specific animals No O3 hart 10 in the report. 18. Does the land holding include a reservoir? (Tick one circle only) Yes No O1 No O2 → Go to question 24 hart 11 and Table 6 in the report.	-	
Rainwater Other (specify) □s nart 9 in the report. 17. Do you monitor water usage for livestock consumption in your farm? (Tick one circle one) Yes, I monitor the overall livestock usage Yes, I monitor the consumption of specific animals No O3 nart 10 in the report. 18. Does the land holding include a reservoir? (Tick one circle only) Yes No O1 No O2 → G0 to question 24 nart 11 and Table 6 in the report.		
Other (specify) □s nart 9 in the report. 17. Do you monitor water usage for livestock consumption in your farm? (Tick one circle one circle one of the consumption of specific animals of the consumption of specific animals of the categories 18. Does the land holding include a reservoir? (Tick one circle only) Yes Of the consumption of the consumption of specific animals of the categories 18. Does the land holding include a reservoir? (Tick one circle only) Yes Of the consumption of specific animals of the categories of the		
The state of the report. 17. Do you monitor water usage for livestock consumption in your farm? (Tick one circle one) Yes, I monitor the overall livestock usage Yes, I monitor the consumption of specific animals No O₃ No O₃ Part 10 in the report. 18. Does the land holding include a reservoir? (Tick one circle only) Yes No O₁ No O₂ → Go to question 24 Part 11 and Table 6 in the report.		
17. Do you monitor water usage for livestock consumption in your farm? (Tick one circle Yes, I monitor the overall livestock usage Yes, I monitor the consumption of specific animals No O ₃ No O ₄ No O ₇ O ₈ No O ₈ O ₈ O ₉ O ₈ O ₁ O ₁ O ₁ O ₂ O ₃ O ₄ O ₇ O ₈ O ₈ O ₈ O ₉ O ₁ O ₁ O ₁ O ₁ O ₂ O ₃ O ₄ O ₇ O ₈ O ₈ O ₈ O ₉ O ₉ O ₁ O ₁ O ₁ O ₁ O ₂ O ₂ O ₃ O ₄ O ₄ O ₇ O ₈ O ₉ O ₈ O ₈ O ₈ O ₈ O ₈ O ₈ O ₉ O		<u> </u>
Yes, I monitor the overall livestock usage Yes, I monitor the consumption of specific animals No O ₃ Port 10 in the report. Oth categories 18. Does the land holding include a reservoir? (Tick one circle only) Yes No O ₁ No O ₂ O ₃ O ₄ O ₇ O ₈ O ₁ O ₁ O ₂ O ₃ O ₄ O ₇ O ₈ O ₈ O ₁ O ₉ O ₁ O ₁ O ₂ O ₂ O ₃ O ₄ O ₄ O ₇ O ₇ O ₈ O ₈ O ₈ O ₈ O ₈ O ₉	art 9 in the report.	
Yes, I monitor the consumption of specific animals O_2 No O_3 Part 10 in the report. Oth categories 18. Does the land holding include a reservoir? (Tick one circle only) Yes O_1 No $O_2 \rightarrow O_3$ Part 11 and Table 6 in the report.	17. Do you monitor water usage for livestock consumption	n in your farm? <i>(Tick one circle)</i>
Yes, I monitor the consumption of specific animals No O ₃ Positive the report. Oth categories 18. Does the land holding include a reservoir? (Tick one circle only) Yes No O ₂ O ₃ Oth categories 18. Does the land holding include a reservoir? (Tick one circle only) Yes O ₁ No O ₂ → Go to question 24	Yes, I monitor the overall livestock usage	O ₁
No O_3 Part 10 in the report. 18. Does the land holding include a reservoir? (Tick one circle only) Yes No $O_2 \rightarrow G_0$ to question 24		
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No $O_2 \rightarrow Go \text{ to question } 24$ art 11 and Table 6 in the report.	th categories	
art 11 and Table 6 in the report.	th categories	rcle only)
	th categories 18. Does the land holding include a reservoir? (Tick one ci n	
 How many reservoirs do you have on your land holding? (Specify the amount of w reservoirs) 	th categories 18. Does the land holding include a reservoir? (Tick one ci	O ₁

Reservior 1 (length) Specify	O ₁
Reservior 1 (width) Specify	O ₂
Reservior 1 (height) Specify	O ₃
Reservior 1 (volume) Specify	O ₄
Reservior 1 (Do not know)	O ₅
	•
Reservior 2 (length) Specify	O ₁
Reservior 2 (width) Specify	O ₂
Reservior 2 (height) Specify	. O ₃
Reservior 2 (volume) Specify	O ₄
Reservior 2 (Do not know)	O ₅
Posonyior 1 (Voor) Specify	
RESERVIOLI CLEATI SDECTIV	
Reservior 1 (Year) Specify	O ₁
Reservior 1 (do not know)	O ₁ O ₂
Reservior 1 (do not know)	O ₂
Reservior 1 (do not know) Reservior 2 (Year) Specify	O ₂
Reservior 1 (do not know)	O ₂
Reservior 1 (do not know) Reservior 2 (Year) Specify	O ₂ O ₁ O ₂
Reservior 1 (do not know) Reservior 2 (Year) Specify Reservior 2 (do not know) : : : 2. Do you consider building further reservoirs on your land	O_2 O_1 O_2 holding? (Tick one circle only) O_1 $O_2 \rightarrow Go \text{ to question } 24$
Reservior 1 (do not know) Reservior 2 (Year) Specify Reservior 2 (do not know) : : : 2. Do you consider building further reservoirs on your land Yes No 7 in the report.	O_2 O_1 O_2 holding? (Tick one circle only) O_1 $O_2 \rightarrow Go \text{ to question } 24$
Reservior 1 (do not know) Reservior 2 (Year) Specify	O_2 O_1 O_2 holding? (Tick one circle only) O_1 $O_2 \rightarrow Go \text{ to question } 24$ rs? (Tick one circle only)

Table 8 in the report.

Yes	$O_{\scriptscriptstyle 1}$
No	$O_2 \rightarrow$ Go to question 26
12 in the report.	
5. What type of energy do you use to pump groundwater to	o the surface? <i>(Tick all that c</i>
Electricity	□1
Fuel/generator	_2
Windmill	3
Other (specify)	4
13 in the report.5. What water saving measures do you practice in your farm Rainwater harvesting systems	
	m? (Tick all that apply)
5. What water saving measures do you practice in your farm Rainwater harvesting systems	
5. What water saving measures do you practice in your farm Rainwater harvesting systems Drip irrigation systems	□1 □2
5. What water saving measures do you practice in your fare Rainwater harvesting systems Drip irrigation systems Soil moisture sensors	□1 □2 □3
5. What water saving measures do you practice in your fare Rainwater harvesting systems Drip irrigation systems Soil moisture sensors Cultivation of crops that require less watering	□ 1 □ 2 □ 3 □ 4
5. What water saving measures do you practice in your fare Rainwater harvesting systems Drip irrigation systems Soil moisture sensors Cultivation of crops that require less watering Other (specify)	□1 □2 □3 □4 □5 □6
6. What water saving measures do you practice in your fare Rainwater harvesting systems Drip irrigation systems Soil moisture sensors Cultivation of crops that require less watering Other (specify) I do not practice any water saving measures 14 in the report.	\Box 1 \Box 2 \Box 3 \Box 4 \Box 5 \Box 0 \Box 6
6. What water saving measures do you practice in your fare Rainwater harvesting systems Drip irrigation systems Soil moisture sensors Cultivation of crops that require less watering Other (specify) I do not practice any water saving measures 14 in the report. 7. Would you like to invest in other water saving measure only)	□1 □2 □3 □4 □5 □6

Chart 15 in the report.

Questionnaire - Maltese version

STHARRIĞ DWAR L-IMMANIĞJAR TAR-RIŻORSI TAL-ILMA FL-AGRIKOLTURA

Jiena <<isem>> mill-Ufficcju Nazzjonali tal-Istatistika. Bħalissa dan l-ufficcju qed jagħmel stħarriġ dwar il-provvisti u l-konsum tal-ilma fost *key stakeholders* fl-oqsma residenzjali, agrikoli u finnegozji manifatturali. Dan l-istħarrig qed isir f'isem l-Aġenzija għall-Enerġija u l-Ilma.

L-azjenda agrikola tiegħek intgħażlet bil-polza biex tieħu sehem f'dan l-istħarriġ li jieħu madwar 10 minuti biex jitlesta. Nista' nitkellem mal-persuna li tista' tagħtini l-iktar informazzjoni preċiża dwar il-konsum tal-ilma fl-azjenda tiegħek?

L-informazzjoni hija kunfidenzjali u ser tintuża biss għal skopjiet ta' statistika.

Fid-dar tiegħek hemm xi ħadd li hu responsabbli minn xi raba'/razzett? lva/Le

1. X'inhi r-responsabbiltà legali u ekonomika tiegħek f' dan ir-raba'/razzett? (Immarka ċirku wieħed biss)

Sid uniku	O ₁
Ftehim ta' sħubija	O ₂
Parti minn kumpanija	O ₃

Table 2 in the report.

2. X'inhi l-attività principali tiegħek? (Immarka ċirku wieħed biss)

Tkabbir ta' ħaxix	$O_{\scriptscriptstyle 1}$
Trobbija tal-annimali	$O_2 \rightarrow$ Mur mistoqsija 14
It-tnejn li huma	O₃

Table 1 in the report.

Biedja

3.	X'inhu d-daqs totali tar-raba' li jinħadem? (Speċifika kemm il-tomna art, kemm jekk raba
	mikri u/jew frank)

Chart 1 and Table 3 in the report.

4.	Kemm il-biċċa art għandek/taħdem? (Speċifika l-amm e	ont ta' parcels)
Chart 2	2 and Table 4 in the report.	
5.	Xi tkabbar fl-art agrikola tiegħek? (Immarka kull fejn jo	applika)
	Siġar tal-frott u dwieli	□1
	Haxix (inkludi frawli, bettiegħ u dulliegħ)	2
	Qamħ (ikel għall-annimali)	3
	Kitchen gardens (Art fejn jitkabbar prodott għall-konsum personali)	4
	Art mistrieħa	5
	Oħrajn (speċifika)	6
6.	L-art tinkludi serer? (Immarka ċirku wieħed biss) Iva	
		01
	Le	O ₂
Table S	5 in the report.	
7.	Liema mill-ħaxix ikkultivat fl-art tiegħek jeħtieġ l-iktar i	lma? (<i>Immarka kull fejn japplika)</i>
	Dulliegħ	 1
	Bettiegħ	 2
	Ħjar	3
	Ħass	 4
	Tadam	 5
	Kaboċċi	 6
	Zunnarija/karrotti	7
	Oħrajn (speċifika)	

Chart 4 in the report.

	Tioniio hid duin	
	Tisqija bid-drip	
	Bexxiexi (sprinklers/farfett)	2
	Tisqija bir-rain gun	3
	Konka/surface irrigation	4
	Biedja idroponika	5
	Oħrajn (speċifika)	6
	Ma nafx	O ₇
hart !	5 in the report.	
9.	Kif tikkontrolla s-sistema tat-tisqija tiegħek?	
	Manwalment permezz ta' vit	
	Meter tal-ilma	
	Time clock irrigation	3
	Soil moisture controllers/sensors	
	Rain sensor	s
	Oħrajn (speċifika)	6
	M'għandix sistemi ta' tisqija	O ₇
	7 in the report. D. Tagħmel moniteraġġ tal-użu tal-ilma għall-bi	iedja fl-azjenda tiegħek? <i>(Immarka ċirku wief</i>
). Tagħmel moniteraġġ tal-użu tal-ilma għall-bi	iedja fl-azjenda tiegħek? <i>(Immarka ċirku wief</i> O1
). Tagħmel moniteraġġ tal-użu tal-ilma għall-bi biss)	1 -
10). Tagħmel moniteraġġ tal-użu tal-ilma għall-bi biss) Iva	O ₁
10 Thart (O. Tagħmel moniteraġġ tal-użu tal-ilma għall-bi biss) Iva Le	O ₁ O ₂ ii ta' ġbir u trattament tad-drenaġġ) biex ssac
10 Thart (O. Tagħmel moniteraġġ tal-użu tal-ilma għall-bi biss) Iva Le 6 in the report. Tuża 'New Water' (ilma ttrattat minn sistem	O ₁ O ₂ ii ta' ġbir u trattament tad-drenaġġ) biex ssac

Chart 8 in the report.

	1
Kwalità inferjuri	☐ ₁ → Mur mistoqsija 14
Nuqqas ta' disponibbiltà fl-inħawi tiegħi	☐ ₂ → Mur mistoqsija 14
II-klijenti ma jafdawx ħaxix u frott frisk irrigat bin- <i>'New Water'</i>	□₃→ Mur mistoqsija 14
Qatt ma smajt bin-'New Water'	O₄→ Mur mistoqsija 14
13. Taħseb li n- 'New Water' huwa t'inqas kwalita' meta mo bħalissa? (Immarka ċirku wieħed biss)	qabbel mas-sorsi oħra ta' ilı
Iva	O ₁
Le	O ₂
Aistoqsijiet 14 sa 17 japplikaw biss jekk Mistoqsija 2=1 jen 14. Liema sors ta'ilma tuża għax-xorb tal-annimali? (Immark	
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark	ka kull fejn japplika)
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? <i>(Immark</i> Ilma tal- <i>main</i> (mhux iffiltrat)	ka kull fejn japplika)
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art	ka kull fejn japplika)
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art Bowser	ka kull fejn japplika) 1 1 2 13
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art Bowser Ilma tax-xita	
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art Bowser Ilma tax-xita Oħrajn (speċifika) Chart 9 in the report. 15. Liema sors ta' ilma tuża biex taħsel l-annimali? (Immarka)	
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art Bowser Ilma tax-xita Oħrajn (speċifika) Chart 9 in the report.	ka kull fejn japplika) 1 2 3 4 5 a kull fejn japplika)
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art Bowser Ilma tax-xita Oħrajn (speċifika) Chart 9 in the report. 15. Liema sors ta' ilma tuża biex taħsel l-annimali? (Immarka) Ilma tal-main (mhux iffiltrat)	ka kull fejn japplika) 1 2 3 4 5 a kull fejn japplika)
14. Liema sors ta' ilma tuża għax-xorb tal-annimali? (Immark Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art Bowser Ilma tax-xita Oħrajn (speċifika) Chart 9 in the report. 15. Liema sors ta' ilma tuża biex taħsel l-annimali? (Immarka Ilma tal-main (mhux iffiltrat) Ilma ta' taħt l-art	ka kull fejn japplika) 1 2 3 4 5 a kull fejn japplika)

tuża

Chart 9 in the report.

	Ilma tal- <i>main</i> (mhux iffiltrat)	
	Ilma ta' taħt l-art	2
	Bowser	3
	Ilma tax-xita	1 4
	Oħrajn (speċifika)	5
		_
hart 9	in the report.	
17.	Tagħmel moniteraġġ tal-użu tal-ilma għall-konsum tal- ċirku wieħed biss)	annimali fl-azjenda tiegħek? (Im
	Iva, fuq l-konsum ġenerali tal- annimali	O ₁
	Iva, fuq I-konsum ta' ċerti annimali speċifiki	O ₂
	Le	O ₃
_	kategoriji Għandek ġibjun/i tal-ilma ġewwa l-azjenda tiegħek/li biss)	taħdem fiha? (<i>Immarka ċirku w</i>
	lva	O ₁
	Le	$O_2 \rightarrow Mur mistoqsija 24$
hart 1	1 in the report.	
	Kemm il-ģibjun tal-ilma għandek? (Speċifika l-ammont	ta' ġibjuni)

wieħed biss għal kull ġibjun)	
÷n	ı
Ġibjun 1 (length) Specify	
Ġibjun 1 (width) Specify	O ₂
Gibjun 1 (height) Specify	O ₃
Gibjun 1 (volume) Specify	O ₄
Ġibjun 1 (Do not know)	05
Gibjun 2 (length) Specify	O ₁
Ġibjun 2 (width) Specify	O ₂
Gibjun 2 (height) Specify	O ₃
Ġibjun 2 (volume) Specify	O ₄
Ġibjun 2 (Do not know)	O ₅
ġibjun)	
	İ
Reservior 1 (Sena) Specify	
Reservior 1 (Sena) Specify Reservior 1 (Ma nafx)	O ₁
Reservior 1 (Ma nafx)	O ₂
Reservior 1 (Ma nafx) Reservior 2 (Sena) Specify	O ₂
Reservior 1 (Ma nafx)	O ₂
Reservior 1 (Ma nafx) Reservior 2 (Sena) Specify	O ₂ O ₁ O ₂ fiha? (Immarka ċirku wieħed biss)
Reservior 1 (Ma nafx) Reservior 2 (Sena) Specify Reservior 2 (Ma nafx) : : : 2. Tixtieq iżżid iktar ġibjuni fuq l-art tiegħek/li taħdem	O ₂ O ₁ O ₂ fiha? (Immarka ċirku wieħed biss)
Reservior 1 (Ma nafx) Reservior 2 (Sena) Specify Reservior 2 (Ma nafx) : : : Z. Tixtieq iżżid iktar ġibjuni fuq l-art tiegħek/li taħdem lva Le	O ₂ O ₁ O ₂ fiha? (Immarka ċirku wieħed biss)
Reservior 2 (Sena) Specify	O_2 O1 O2 fiha? (Immarka ċirku wieħed biss) O1 O2 \rightarrow Mur mistoqsija 24
Reservior 2 (Sena) Specify	O_2 O1 O2 fiha? (Immarka ċirku wieħed biss) O1 O2 \rightarrow Mur mistoqsija 24
Reservior 2 (Sena) Specify	O ₂ O ₁ O ₂ fiha? (Immarka ċirku wieħed biss) O ₁ O ₂ → Mur mistoqsija 24 marka ċirku wieħed biss)

Table 8 in the report.

lva	Oı
Le	$O_2 \rightarrow Mur mistoqsija 26$
	O2 7 William Miscoqsija 20
N	
Chart 12 in the report.	
5. X'tip ta' enerģija tuża biex ittella' l-ilma ta' taħt l-art	sal-wićć? (<i>lmmarka kull fejn jappl</i>
Elettriku	
Fuel/ġeneratur	2
Mithna tar-rih	3
Oħrajn (speċifika)	4
t 13 in the report. 6. X'miżuri ta' ffrankar ta' I-ilma tipprattika fl-azjenda ti	egħek? (<i>Immarka kull fejn japplik</i>
.6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti	egħek? (<i>Immarka kull fejn japplik </i> □1
, and the second	
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita	□ 1
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita Drip irrigation system	□1 □2
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor	□1 □2 □3
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtieġu inqas tisqija	□1 □2 □3 □4
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtieġu inqas tisqija Oħrajn (speċifika)	□1 □2 □3 □4 □5
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtieġu inqas tisqija Oħrajn (speċifika) Ma nieħu l-ebda miżura biex niffranka l-ilma	□1 □2 □3 □4 □5
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtieġu inqas tisqija Oħrajn (speċifika)	□1 □2 □3 □4 □5
Sistemi ta' gbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtiegu inqas tisqija Oħrajn (speċifika) Ma nieħu l-ebda miżura biex niffranka l-ilma	□1 □2 □3 □4 □5 □6
6. X'miżuri ta' ffrankar ta' l-ilma tipprattika fl-azjenda ti Sistemi ta' ġbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtieġu inqas tisqija Oħrajn (speċifika) Ma nieħu l-ebda miżura biex niffranka l-ilma	□1 □2 □3 □4 □5 □6
Sistemi ta' gbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtiegu inqas tisqija Oħrajn (speċifika) Ma nieħu l-ebda miżura biex niffranka l-ilma	□1 □2 □3 □4 □5 □6
Sistemi ta' gbir tal-ilma tax-xita Drip irrigation system Soil moisture sensor Tkabbir ta' prodotti li jeħtieġu inqas tisqija Oħrajn (speċifika) Ma nieħu l-ebda miżura biex niffranka l-ilma # 14 in the report. 7. Tixtieq tinvesti f'miżuri oħra li jiffrankaw l-ilma fil-fut	□1 □2 □3 □4 □5 □6 cur? (Immarka ċirku wieħed biss)