

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

Water Survey – Households

SURVEY UNDERTAKEN IN NOVEMBER 2019

HOUSEHOLD CHARACTERISTICS

The target population of this survey consisted of all private households in the Maltese Islands. In 2019, these amounted to 203,854 units.

Table 1. Total number of households classified by district of residence and type of household

	District of residence						Total
Type of household	Southern Harbour	Northern Harbour	South Eastern	Western	Northern	Gozo and Comino	number of households
Terraced house/Townhouse	15,782	29,044	16,382	13,399	17,425	11,241	103,272
Semi-detached house	316	726	271	909	1,036	53	3,311
Fully-detached house	212	540	115	530	1,068	155	2,619
Maisonette/Ground floor tenement	8,753	18,080	7,354	5,455	7,087	1,291	48,020
Flat/Apartment/Penthouse	7,964	20,793	4,383	2,459	8,806	968	45,373
Semi-detached farmhouse	0	0	30	111	483	39	663
Fully-detached farmhouse	0	0	42	111	204	53	410
Other	0	0	128	58	0	0	186
Total number of households	33,028	69,183	28,704	23,031	36,109	13,799	203,854

From the survey it resulted that the highest share of private households are located in the Northern Harbour district (33.9 per cent), while Gozo and Comino comprise the smallest amount of households (6.8 per cent).

With regards to composition, two person households are the most frequent household size at 31.9 per cent followed by single person households at 27.6 per cent. Households having a size of five or more persons constitute the smallest category (6.9 per cent).

When considering the household characteristics by type, the terraced house/townhouse category is the largest (50.7 per cent). The maisonette/ground floor tenement and

flat/apartment/penthouse categories comprise the bulk of the rest at 23.6 per cent and 22.3 per cent respectively.

Type of household -		Total				
	1	2	3	4	5+	number of households
Terraced house/Townhouse	28,101	33,746	19,010	14,713	7,703	103,272
Semi-detached house	435	1,172	1,054	416	233	3,311
Fully-detached house	1,131	448	407	510	123	2,619
Maisonette/Ground floor tenement	13,528	14,368	8,342	8,475	3,307	48,020
Flat/Apartment/Penthouse	13,013	14,922	8,368	6,391	2,679	45,373
Semi-detached farmhouse	57	91	319	128	69	663
Fully-detached farmhouse	57	212	54	65	22	410
Other	0	129	57	0	0	186
Total number of households	56,322	65,088	37,611	30,698	14,135	203,854

 Table 2. Total number of households classified by household size and type of household

With regards to tenure status, the majority of households are owned freehold (78.4 per cent). A further 6.7 per cent are owned with ground rent. Rented dwellings comprise 13.5 per cent of the total.

Type of household	No reply to this question	Owned freehold	Owned with ground rent	Rented (furnished or unfurnished)	Held by emphyteusis	Used free of charge	Total number of households
Terraced house/Townhouse	219	86,846	4,732	10,199	618	657	103,272
Semi-detached house	0	2,982	155	0	174	0	3,311
Fully-detached house	0	2,211	170	239	0	0	2,619
Maisonette/Ground floor tenement	28	34,814	5,139	7,397	294	347	48,020
Flat/Apartment/Penthouse	53	32,142	3,312	9,359	0	508	45,373
Semi-detached farmhouse	0	434	0	229	0	0	663
Fully-detached farmhouse	0	235	91	84	0	0	410
Other	0	71	0	115	0	0	186
Total number of households	300	159,735	13,598	27,622	1,086	1,512	203,854

WATER USE

One of the main aims of this survey was to gather information about water usage characteristics in households. With regards to water that is used for drinking, the majority of Maltese households use bottled water (74.3 per cent). Tap water is also used by 19.4 per cent of households for drinking purposes followed by water filtered by means of domestic reverse osmosis at 11.6 per centⁱ.

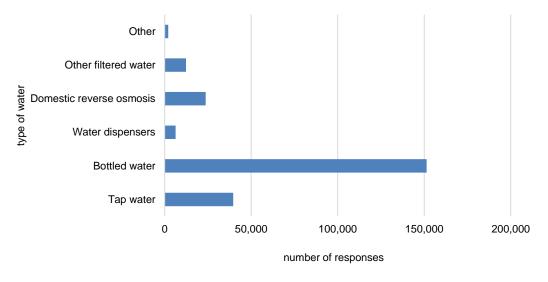


Chart 1. Type of water used for drinking in households

In the case of water use in the kitchen, the situation changes since 87.5 per cent of households use municipal mains water (tap water). Additionally, 9.9 per cent of households utilise water from the roof tank, followed by a further 3.8 per cent which uses water from a well or water cisternⁱ.

For water that is used in the bathroom the most prevalent source is the roof tank (82.7 per cent) followed by municipal mains water (14.1 per cent) and the well or water cistern (7.6 per cent)ⁱ.

With regards to water for outdoor use, municipal mains water is the dominant type of water (49.2 per cent). Water originating from the roof tank and the well or water cistern

comes next with 24.1 per cent and 22.8 per cent of outdoor water usage by households respectivelyⁱ.

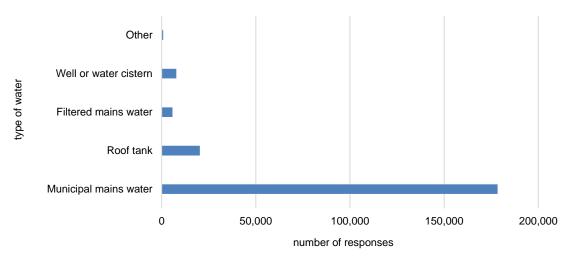
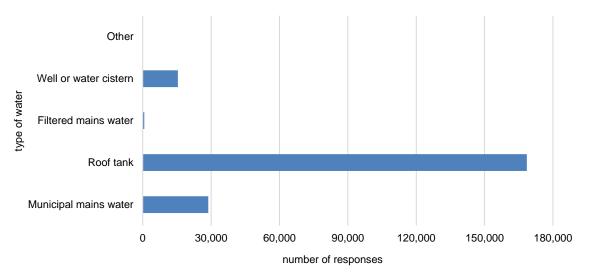


Chart 2. Type of water used in the kitchen by households

Chart 3. Type of water used in the bathroom by households



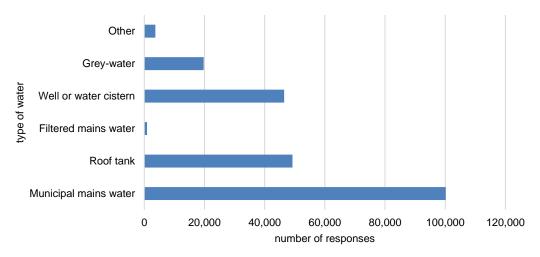


Chart 4. Type of water used outdoor by households

The analysis that follows is related to the use of water that is harvested by means of wells. In Malta, 43.3 per cent of households have the availability of a well to collect rainwater. By district, the highest amount of available wells can be found in the Northern Harbour (25.7 per cent). By contrast, the lowest number of wells is to be found in Gozo and Comino (5.1 per cent). However, if the share of available wells is to be calculated within districts, one would observe that the South Eastern district has the highest rate of well availability (58.1 per cent) as opposed to Gozo and Comino that have the lowest rate of well availability (32.3 per cent).

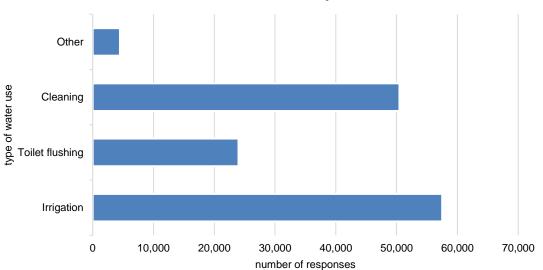
District of residence	Availability o collect rai	Total households	
	Yes	No	
Southern Harbour	12,072	20,956	33,028
Northern Harbour	22,687	46,496	69,183
South Eastern	16,689	12,015	28,704
Western	13,163	9,868	23,031
Northern	19,141	16,968	36,109
Gozo and Comino	4,462	9,337	13,799
Total households	88,213	115,641	203,854
Percentage from total number of households	43.3	56.7	100.0

Table 4. Availability of a well to collect rainwater in households by district of residence

Type of household	Does not have a well —	conected in wen		Total households
		Yes	No	nousenoius
Terraced house/Townhouse	37,536	52,342	13,395	103,272
Semi-detached house	400	2,742	169	3,311
Fully-detached house	328	1,801	490	2,619
Maisonette/Ground floor tenement	33,656	9,829	4,535	48,020
Flat/Apartment/Penthouse	43,224	1,067	1,082	45,373
Semi-detached farmhouse	348	315	0	663
Fully-detached farmhouse	22	301	87	410
Other	128	58	0	186
Total households	115,641	68,455	19,758	203,854
Percentage from total number of households	56.7	33.6	9.7	100.0

Table 5. Use of water collected from well by type of household

With regards to the use of the water that is collected from wells 77.6 per cent of those households having a well make regular use of the water that is collected. The remaining 19,758 households that do not make regular use of their well cited maintenance issues as the primary reason (54.9 per cent) for failing to use their well. The secondary reason for not using the well was of having no use for the water that was collected (12.0 per cent)ⁱ.





Households that declare to make regular use of the water collected from their well amount to 68,455. The majority of these households, 84.0 per cent make use of this water for irrigation purposes, followed by 73.7 per cent that make use of this water for cleaning purposes. The third most significant use for water that is collected by means of wells is for toilet flushing (35.0 per cent)ⁱ.

	Reason for not using water from well							
Type of household	Well needs maintenance	Pump does not work	Need further guidance on how to use this water	Not worth it; mains water is not expensive	No use for it	Other		
Terraced house/Townhouse	7,635	1,577	125	813	1,262	2,267		
Semi-detached house	58	0	0	57	0	54		
Fully-detached house	132	0	0	61	259	38		
Maisonette/Ground floor tenement	2,724	55	0	0	780	977		
Flat/Apartment/Penthouse	276	30	0	0	80	695		
Semi-detached farmhouse	0	0	0	0	0	0		
Fully-detached farmhouse	30	57	0	0	0	0		
Other	0	0	0	0	0	0		
Total response	10,856	1,719	125	931	2,381	4,031		
Percentage from total number of households not using water from well	54.9	8.7	0.6	4.7	12.0	20.4		

Table 6. Reasons for not using water from well by type of household

A total of 115,641 households do not have a well. Out of these, 66.6 per cent stated that one of the reasons for not having a well is living in a maisonette or apartment where no well is installed. 13.6 per cent mentioned that the well was not dug when the dwelling was being built (part of the 'Other' category) as another reason for not having a well. The third most cited reason is living in a maisonette or apartment where a well is installed but there is no access to it (6.9 per cent)ⁱ.

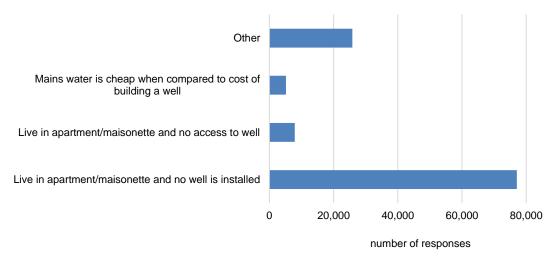


Chart 6. Reason for not having well in households

The survey also asked households whether they make use or not of bowser water. In total 34,857 households (17.1 per cent) make use of bowser water. Echoing similar results that were obtained for the availability of a well by type of household (see Table 5), 71.3 per cent of households that make use of bowser water were terraced houses/townhouses, followed by maisonettes/ground floor tenements at 15.2 per cent.

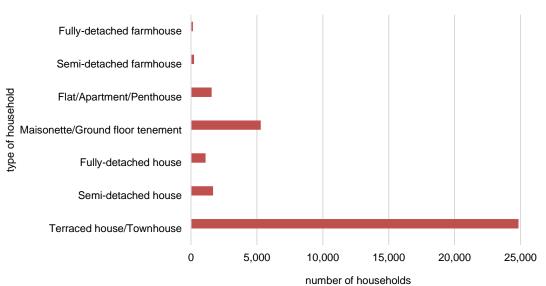


Chart 7. Use of bowser water by type of household

With regards to the origin/quality of bowser water, 47.6 per cent of households using bowser water check the origin or quality of the water, whilst the remaining households do not.

Turne of household	Checks on origin/quality of bowser water				
Type of household	Yes	No	Total households		
Terraced house/Townhouse	11,983	12,870	24,853		
Semi-detached house	974	695	1,669		
Fully-detached house	752	352	1,104		
Maisonette/Ground floor tenement	2,486	2,807	5,293		
Flat/Apartment/Penthouse	368	1,201	1,568		
Semi-detached farmhouse	16	210	226		
Fully-detached farmhouse	30	113	143		
Other	0	0	0		
Total households	16,609	18,248	34,857		
Percentage from total number of households that use bowser water	47.6	52.4	100.0		

Table 7. Checks on the origin/quality of bowser water by type of household

During the survey, households were also asked about the availability of water efficient flushing and water efficient faucets or taps in their dwellings. The results show that 40.0 per cent of households have water efficient flushing while 57.1 per cent do not. Those who do not know what a water efficient flushing is amounted to 2.8 per cent. On a district basis, the highest proportion of households that have water efficient flushing is in the Southern Harbour and Northern districts (42.5 per cent). On the other hand, Gozo and Comino have the lowest proportion of households with water efficient flushing (28.8 per cent).

Water efficient faucets or taps that are installed in the kitchen sink and wash hand basins are only found in 9.4 per cent of households. 86.6 per cent do not have such installations and 3.9 per cent do not know what they are. On a district basis the highest proportion of

households having water efficient faucets/taps is found in Gozo and Comino (12.9 per cent), and the lowest proportion is in the South Eastern district (7.2 per cent).

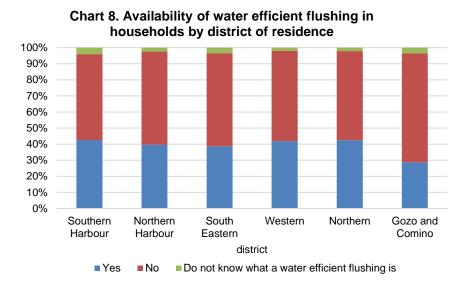
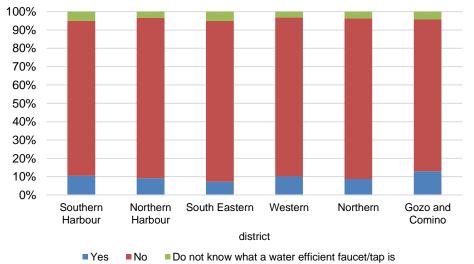


Chart 9. Availability of water efficient faucet/tap with kitchen sink/hand-wash basin in households by district of residence



WATER PERCEPTION

A number questions that were asked during the survey deal with the households' perception of various water sources. With regards to the safety of mains water for drinking, 60.7 per cent of households do not consider this type of water as safe to drink. On a district basis, the values range from 66.3 per cent in Gozo and Comino to 56.8 per cent in the Southern Harbour district.

District of residence	No reply to this guestion	Consider mains to drir	Total households	
	and quotaen .	Yes	No	noucenterae
Southern Harbour	445	13,832	18,750	33,028
Northern Harbour	1,541	24,820	42,821	69,183
South Eastern	212	11,374	17,118	28,704
Western	163	9,144	13,724	23,031
Northern	511	13,485	22,113	36,109
Gozo and Comino	183	4,460	9,156	13,799
Total households	3,055	77,117	123,682	203,854
Percentage from total number of households	1.5	37.8	60.7	100.0

 Table 8. Perception of the safety of mains water for drinking in households by district of residence

When considering the roof tank water, only 9.0 per cent of households consider this water as safe to drink. By viewing the results by type of household it can be noted that the proportion of households that considers this water as safe to drink is the highest for the fully detached farmhouses (26.8 per cent) and lowest for the fully detached houses (1.4 per cent).

With regards to bottled water, 68.6 per cent of households say they have trust in the quality of this water, followed by 22.0 per cent who do not trust its quality. The remaining 9.5 per cent of households do not know whether to trust the quality of this water or not.

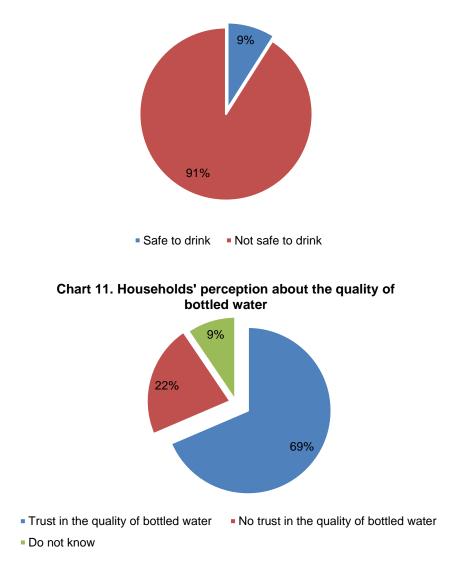


Chart 10. Households' perception about roof tank water

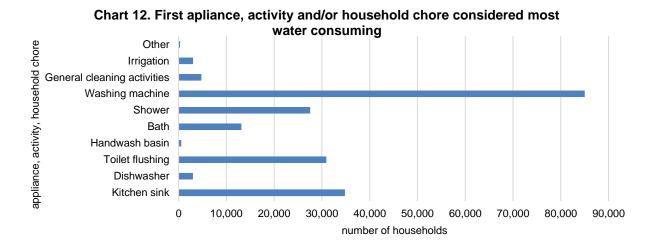
The cost of bottled water is considered as more expensive in comparison to tap water by 53.1 per cent of households. 32.2 per cent of households declared that they do not know whether bottled water is more expensive than tap water or not while 14.6 per cent of households considered tap water to be more expensive. At the district level, the highest proportion of those households that consider tap water to be more expensive is found in the Northern Harbour district (15.4 per cent) and the lowest is in Gozo and Comino (12.0 per cent).

Table 9. Households' perception on the cost of bottled water by district of residence

	Consider bottle water more expensive than tap water				
District of residence	Yes	No	Do not know	Total households	
Southern Harbour	17,583	4,884	10,561	33,028	
Northern Harbour	37,141	10,661	21,381	69,183	
South Eastern	15,774	4,275	8,655	28,704	
Western	12,802	3,258	6,971	23,031	
Northern	17,744	5,076	13,289	36,109	
Gozo and Comino	7,279	1,654	4,866	13,799	
Total households	108,323	29,808	65,723	203,854	
Percentage from total number of households	53.1	14.6	32.2	100.0	

Consider bottle water more expensive than tap water

Households were also asked to rank their appliances, activities or household chores according to what they think is the most water consuming. The washing machine was the first choice for 85,004 households (41.7 per cent), surpassing by far all the other appliances and activities. For the second ranking the most popular choice was the shower, chosen by 46,070 households (22.6 per cent). The kitchen sink was the most preferred option for the third ranking, chosen by 33,377 households (16.4 per cent).



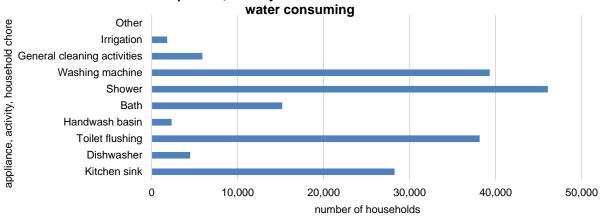


Chart 13. Second apliance, activity and/or household chore considered most

Chart 14. Third apliance, activity and/or household chore considered most water consuming appliance, activity, household chore Other Irrigation General cleaning activities Washing machine Shower Bath Handwash basin **Toilet flushing** Dishwasher Kitchen sink 0 5,000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 number of households

With regards to the perception of dishwasher water consumption, 45.8 per cent of households do not know whether it consumes more water than the kitchen sink or not. The remaining households are equally divided between those who think that the kitchen sink consumes more (27.2 per cent) and those who think that the dishwasher consumes more (27.0 per cent).

Table 10. Households' perception on dishwasher water consumption by household size

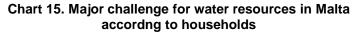
Household size (in groups)	Dishes consume most water when washed in kitchen basin vs. dishwasher					
	Kitchen basin	Dishwasher	Do not know	Total households		
1	10,791	13,337	32,194	56,322		
2	15,526	18,821	30,741	65,088		
3	12,291	10,146	15,173	37,611		
4	11,240	9,033	10,425	30,698		
5+	5,577	3,682	4,875	14,135		
Total households	55,426	55,020	93,409	203,854		
Percentage from total number of households	27.2	27.0	45.8	100.0		

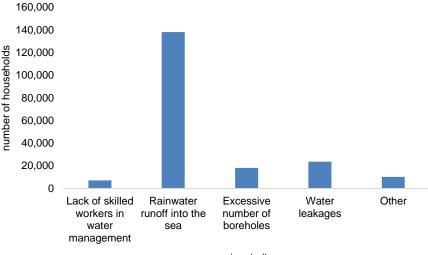
The perception of households on the water utility bill cost was another issue that was investigated by this survey. The majority of households (54.9 per cent) do not consider these bills as expensive. If the figures are analysed by household size one can notice that there is a progressive reduction in those households that perceive their bills to be not expensive. In fact, 59.7 per cent of two person households do not consider their water utility bills as expensive, while for households with five or more persons this figure goes down to 47.8 per cent.

The survey also addressed the households' perception of the major challenge for water resources in Malta. A total of 138,118 households or 67.8 per cent of the total considered rainwater runoff into the sea as the major challenge. By district, this perception is strongest in the Southern harbour and South Eastern districts (70.3 per cent) and weakest in Gozo and Comino (63.0 per cent). Water leakages are considered as the major challenge by 11.6 per cent, while 8.9 per cent consider the excessive number of boreholes as the primary challenge for water resources in Malta.

Table 11. Households' perception on water bill cost by household size

Household size (in groups)	No reply to this —	No reply to this Consider water bill as expensive					
	question	Yes	Νο	Do not know	Total households		
1	209	17,473	32,149	6,491	56,322		
2	0	19,436	38,884	6,767	65,088		
3	25	14,337	19,199	4,051	37,611		
4	0	11,254	14,886	4,558	30,698		
5+	0	5,431	6,762	1,942	14,135		
Total households	233	67,932	111,880	23,809	203,854		
Percentage from total number of households	0.1	33.3	54.9	11.7	100.0		





major challenge

Flooding is another issue that is closely related to water resources. 71.4 per cent of households consider flooding to be a serious issue for Malta. By district, the proportion of households that perceive flooding to be a serious issue vary from 61.5 per cent in Gozo and Comino to 77.2 per cent in the South Eastern district. Those which do not perceive flooding to be a serious issue account for 22.3 per cent and 5.8 per cent of all households respectively.

With regards to fruit and vegetables that are grown on land that is irrigated by means of highly polished treated municipal wastewater (New Water), 35.0 per cent of households have issues with this agricultural produce, compared to 50.0 per cent that do not have any issues. The highest proportion of households that have an issue with irrigation by

means of 'New Water' are found in the South Eastern district (39.8 per cent) while the lowest proportion is found in the Northern Harbour district (31.3 per cent).

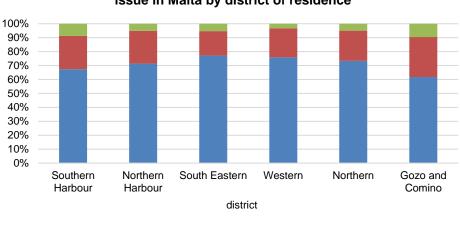


Chart 16. Households that consider flooding a serious issue in Malta by district of residence

■ Yes ■ No ■ Do not know

	Have any issues with fruit and vegetables irrigated with 'New Water'				Total	
District of residence	this question	Yes	No	Do not know	households	
Southern Harbour	95	11,947	16,215	4,770	33,028	
Northern Harbour	565	21,631	37,107	9,880	69,183	
South Eastern	30	11,433	13,568	3,673	28.704	
Western	199	8,503	11,369	2,960	23.031	
Northern	0	12,831	17,247	6,031	36,109	
Gozo and Comino	49	4,928	6,460	2,362	13,799	
Total households	938	71,274	101,966	29,676	203,854	

Table 12. Households' perception of irrigation by means of 'New Water' by district of residence

BEHAVIOURAL ASPECTS

The survey also delved into the behavioural aspects of households with regards to the use of water. Households were asked whether they utilise water saving mode on their washing machine. 56.0 per cent of all households use this feature, followed by 29.3 per cent which do not and 14.5 per cent which are unaware of the presence of such a feature in their appliance. The proportion of those who utilise the water saving mode feature increases by household size so that the proportion for single person households stands at 41.0 per cent whilst those for four and five+ persons stand at 64.7 per cent and 64.6 per cent respectively.

		Utilise water saving mode on washing machine			
Household size (in groups)	No reply to this question	Yes	No	Do not know if I have this feature on my washing machine	Total households
1	431	23,097	21,699	11,095	56,322
2	71	38,582	18,131	8,305	65,088
3	0	23,395	9,381	4,835	37,611
4	0	19,868	6,970	3,860	30,698
5+	0	9,132	3,477	1,526	14,135
Total households	502	114,074	59,658	29,620	203,854
Percentage from total number of households	0.2	56.0	29.3	14.5	100.0

Table 13. Utilisation of water saving mode on the washing machine by household size

A similar progressive trend by household size can be noted with regards to whether one looks or not for water efficiency labels/rating when buying appliances. In fact, this proportion increases from 55.7 per cent for one person households to 79.4 per cent for households with five or more persons. Overall 69.6 per cent of all households look for these labels and ratings, while 30.0 per cent do not.

Household size (in	No reply to this	Total		
groups)	question	Yes	Νο	households
1	530	31,385	24,406	56,322
2	71	47,964	17,053	65,088
3	0	27,937	9,674	37,611
4	0	23,439	7,259	30,698
5+	59	11,224	2,852	14,135
Total households	659	141,949	61,245	203,854
Percentage from total number of households	0.3	69.6	30.0	100.0

Table 14. Importance of water efficiency labels/rating upon appliance purchase by household size

Water usage is monitored by means of ARMS water bills by 61.4 per cent of households. The use of water bills as a monitoring tool also increases by household size. The proportion for single person households stands at 50.0 per cent, increasing to 69.3 per cent for households with 5 persons or more.

Household size (in groups)	No reply to this	Use of ARMS water water usa	Total	
	question	Yes	No	households
1	398	28,155	27,769	56,322
2	0	41,129	23,959	65,088
3	0	25,267	12,344	37,611
4	0	20,813	9,884	30,698
5+	0	9,791	4,344	14,135
Total households	398	125,155	78,301	203,854
Percentage from total number of households	0.2	61.4	38.4	100.0

Table 15. Use of ARMS water bill to monitor water usage by househ	old size

The cost of water per billing period is only known by 37.3 per cent of households. At the district level, results vary from 30.0 per cent in Gozo and Comino to 40.4 per cent in the South Eastern district.

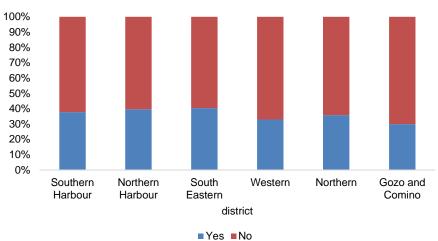


Chart 17. Households' knowledge of cost of water per billing period by district of residence

The survey also queried households about their awareness of water leakage testing methods. The most popular method was by visual inspection for water patches or pools, chosen by 59.0 per cent of all households. This was followed by the use of the water meter which branches into two main methods: higher than usual readings on the water meter (25.9 per cent) and shutting off all outlets and checking for any registered consumption on the meter (16.3 per cent)ⁱ.

Table 16. Households' awareness of water leakage testing methods by district of
residence

		Water leakage testing method aware of				
District of residence	No reply to this question	Visible water patches/pools	Audible systems detecting water leakages when all supply is shut off	Higher than usual reading on water meter	Water meter registering consumption when all outlets are shut off	
Southern Harbour	95	19,784	3,785	7,768	5,450	
Northern Harbour	0	40,888	9,094	18,767	9,670	
South Eastern	57	16,937	3,715	7,193	5,115	
Western	172	13,333	3,088	6,290	4,057	
Northern	198	22,140	3,930	9,332	6,381	
Gozo and Comino	79	7,268	1,102	3,378	2,531	
Total response	601	120,350	24,714	52,728	33,204	
Percentage from total number of households	0.3	59.0	12.1	25.9	16.3	

¹ Households could choose more than one option when replying to this question.

Questionnaire – English version

SURVEY ON PATTERNS OF WATER USE IN PRIVATE HOUSEHOLDS

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

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

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

1. What type of household do you live in? (*Tick one circle only*)

Terraced house/Townhouse	O 1
Semi-detached house	02
Fully-detached house	O ₃
Maisonette/Ground floor tenement	O ₄
Flat/Apartment/Penthouse	O 5
Semi-detached farmhouse	O ₆
Fully-detached farmhouse	0 ₇
Other (Specify)	O ₈

Table 1 in the report

2. Is your dwelling owned or rented? (*Tick one circle only*)

Owned freehold	O1
Owned with ground rent	02
Rented (furnished or unfurnished)	O ₃
Held by emphyteusis	O ₄
Used free of charge	O5

Table 3 in the report

3. What type of water is used in your household for drinking? (*Tick all that apply*)

Tap water	
Bottled water (excluding water dispensers)	2
Water dispensers	3
Domestic reverse osmosis	4
Other filtered water	5
Other (Specify)	6

Chart 1 in the report

4. What type of water do you use in your kitchen? (Tick all that apply)

Municipal mains water	
Roof tank	2
Filtered mains water	3
Well or water cistern	4
Other (Specify)	5

Chart 2 in the report

5. What type of water do you use in your bathroom? (*Tick all that apply*)

Municipal mains water	1
Roof tank	2
Filtered mains water	3
Well or water cistern	4
Other (Specify)	5

Chart 3 in the report

6. What type of water do you use for outdoor and exterior use (e.g. garden, yard, terrace, rooftop, drive-in, etc.)? (*Tick all that apply*)

Municipal mains water	
Roof tank	2
Filtered mains water	3

Well or water cistern	4
Grey-water (i.e. wastewater from e.g. handwash basins	5
or showers which is re-used)	
Other (Specify)	6

Chart 4 in the report

7. Do you consider mains water safe to drink (i.e. water supplied by the Water Services Corporation)? (*Tick one circle only*)

Yes	01
No	02

Table 8 in the report

8. Do you consider water from your roof tank safe to drink? (*Tick one circle only*)

Yes	O1
No	02

Chart 10 in the report

9. Do you have a well to collect rainwater? (*Tick one circle only*)

Yes	0 ₁
No	$O_2 \rightarrow$ Go to question 13

Table 4 in the report

10. Do you regularly use the water you collect in your well? (*Tick one circle only*)

Yes	01
No	$O_2 \rightarrow$ Go to question 12

Table 5 in the report

11. What do you use the water from your well for? (*Tick all that apply*)

Irrigation	$\Box_1 \rightarrow$ Go to question 14
Toilet flushing	$\square_2 \rightarrow$ Go to question 14
Cleaning (washing of floors, cars, etc.)	$\square_3 \rightarrow$ Go to question 14
Other (Specify)	$\Box_4 \rightarrow$ Go to question 14

Chart 5 in the report

12. Why don't you regularly use the water you collect in your well? (*Tick all that apply*)

Well needs maintenance (e.g. leaking)	$\Box_1 \rightarrow$ Go to question 14
Pump does not work	$\square_2 \rightarrow$ Go to question 14
Need further guidance on how to use this water	$\square_3 \rightarrow$ Go to question 14
Not worth it because mains water is not expensive	$\Box_4 \rightarrow$ Go to question 14
I don't have a use for it	\Box ₅→ Go to question 14
Other (Specify)	$\Box_6 \rightarrow$ Go to question 14

Table 6 in the report

13. Why don't you have a well? (*Tick all that apply*)

2
3

Chart 6 in the report

14. Do you trust the quality of bottled water? (Tick one circle only)

Yes	O1
No	O ₂
Do not know	O ₃

Chart 11 in the report

15. Do you consider bottled water as expensive when compared to tap water? (Tick one circle only)

Yes	O ₁
No	02
Do not know	03

Table 9 in the report

16. Do you use bowser water at home? (Tick one circle only)

Yes	O1
No	$O_2 \rightarrow$ Go to question 18

Chart 7 in the report

17. Do you check the origin and quality of the bowser water you purchase? (*Tick one circle only*)

Yes	O ₁
No	02

Table 7 in the report

18. What appliances, activities and/or household chores do you believe consume the most water within your household? (*Select up to three options and rank* accordingly)

Kitchen sink	
Dishwasher	2
Toilet flushing	3
Handwash basin	4
Bath	5
Shower	6
Washing machine	7
General cleaning activities (e.g. floor washing)	8
Irrigation	9
Other (Specify)	10

Charts 12, 13 and 14 in the report

19. Do you think that more water is consumed when dishes are washed in the kitchen basin or in a dishwasher? (*Tick one circle* only)

Kitchen basin	O 1
Dishwasher	O ₂
Do not know	O ₃

Table 10 in the report

20. Do you have a water efficient flushing installed? (Tick one circle only)

Yes	O 1
No	02
Do not know what a water efficient flushing is	03

Chart 8 in the report

21. Do you have a water efficient faucet/tap installed with your kitchen sink/handwash basin? (*Tick one circle only*)

Yes	01
No	O ₂
Do not know what a water efficient faucet/tap is	03

Chart 9 in the report

22. Do you utilise water saving mode when using your washing machine? (Tick one circle only)

Yes	0 ₁
No	02
Do not know if I have this feature on my washing	03
machine	

Table 13 in the report

23. Do you look for water efficiency labels/ratings when buying new appliances that use water? (*Tick one circle only*)

Yes	01
No	02

Table 14 in the report

24. Do you monitor your water usage by reading the water bills you receive from ARMS? (*Tick one circle only*)

Yes	O 1
No	O ₂

Table 15 in the report

25. Do you know the cost of water per billing period? (Tick one circle only)

Yes	0 ₁
No	O ₂

Chart 17 in the report

26. Do you consider your water bill as expensive? (Tick one circle only)

Yes	O ₁
No	02
Do not know	O ₃

Table 11 in the report

27. What water leakage testing methods are you aware of? (Tick all that apply)

Visible water patches/pools	1
Audible systems detecting water leakages when all supply is shut off	2
Higher than usual reading on water meter	3

Water meter registering consumption when all supply is shut off	4
None	O ₅

Table 16 in the report

28. What do you think is the major challenge water resources in Malta face? (Tick one circle only)

Lack of skilled workers in water management	O ₁
Rainwater runoff into the sea	02
Excessive number of boreholes	O ₃
Water leakages	O ₄
Other (Specify)	O ₅

Chart 15 in the report

29. Do you consider flooding a serious issue in Malta? (Tick one circle only)

Yes	01
No	02
Do not know	03

Chart 16 in the report

30. 'New Water' is highly polished reclaimed water originating from municipal wastewater which can be used for agriculture, industry and landscaping. Do you have any perceived issues with fruits and vegetables irrigated with 'New Water'? (*Tick one circle only*)

Yes	O1
No	02
Do not know	O ₃

Table 12 in the report

Demographic details:

31. How old are you? (Specify age)

32. How many persons reside in your dwelling? (Specify number of household members)

Table 2 in the report

33. In which locality do you reside? (Specify locality)

Questionnaire – Maltese version

STĦARRIĠ DWAR TENDENZI FL-UŻU TAL-ILMA FID-DJAR

Jiena <<isem>> mill-Uffiċċju Nazzjonali tal-Istatistika. Bħalissa dan l-uffiċċju qed jagħmel stħarriġ dwar il-provvisti u l-konsum tal-ilma fid-djar Maltin. Dan l-istħarrig qed isir f'isem l-Aġenzija għall-Enerġija u l-Ilma.

Id-dar tagħkom 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 talilma fid-dar tiegħek?

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

1. X'tip ta' dar toqghod/toqoghdu fiha? (Immarka cirku wiehed biss)

Dar terraced/Townhouse	O ₁
Dar semi-detached	02
Dar fully-detached	O ₃
Mezzanin (Maisonette)/Terran	O ₄
Flat/Appartament/Penthouse	05
Razzett semi-detached	O ₆
Razzett fully-detached	07
Oħrajn (Speċifika)	. 08

Table 1 in the report

2. Din id-dar...? (Immarka cirku wieħed biss)

Hi tiegħek/tagħkhom, mingħajr ċens	O 1
Hi tiegħek/tagħkhom u jitħallas iċ-ċens fuq l-art	02
Tinkera (bl-għamara jew mingħajr għamara)	03
Jitħallas iċ-ċens fuqha (kuntratt nutarili)	O ₄
Tintuża mingħajr ħlas	05

Table 3 in the report

3. X'tip ta' ilma jintuża għax-xorb fid-dar tiegħek/tagħkom? (Immarka kull fejn japplika)

llma tal-vit	
Ilma fil-fliexken (eskludi water dispensers)	2
Water dispensers	3
Reverse Osmosis domestiku	4
Ilma ffiltrat ieħor	5

Chart 1 in the report

4. X'tip ta' ilma tuża/w fil-kċina? (Immarka kull fejn japplika)

llma tal- <i>main</i> (mhux iffiltrat)	
Ilma mit-tank tal-bejt	2
llma tal- <i>main</i> (iffiltrat)	3
Bir jew ģiebja tal-ilma	4
Oħrajn (Speċifika)	 5

Chart 2 in the report

5. X'tip ta' ilma tuża/w fil-kamra tal-banju? (Immarka kull fejn japplika)

llma tal- <i>main</i> (mhux iffiltrat)	
Ilma mit-tank tal-bejt	2
Ilma tal- <i>main</i> (iffiltrat)	3
Bir jew ģiebja tal-ilma	4
Oħrajn (Speċifika)	5

Chart 3 in the report

6. X'tip ta' ilma tuża/w għal barra (eż. ġnien, bitħa, terazzin, bejt, *drive-in*, eċċ.)? (*Immarka kull fejn japplika*)

Ilma tal- <i>main</i> (mhux iffiltrat)	
Ilma mit-tank tal-bejt	2
Ilma tal- <i>main</i> (iffiltrat)	3
Bir jew ģiebja tal-ilma	4
Grey-water (Ilma mormi wara li jintuża eż. sink għall-	5
ħasil tal-idejn jew doċċa, u li jista' jerġa' jintuża)	
Oħrajn (Speċifika)	6

Chart 4 in the report

7. Taħseb li l-ilma tal-*main* huwa tajjeb għax-xorb? (eż. ilma pprovdut mill-Korporazzjoni għas- Servizzi tal-Ilma) (*Immarka ċirku wieħed biss*)

lva	O1
Le	O ₂

Table 8 in the report

8. Taħseb li l-ilma mit-tank tal-bejt tiegħek/tagħkom huwa tajjeb għax-xorb? (Immarka ċirku wieħed biss)

Iva	O ₁
Le	02

Chart 10 in the report

9. Għandek/għandkom bir fejn tiġbor/tiġbru l-ilma tax-xita mad-dar? (Immarka ċirku wieħed biss)

Iva	O ₁
Le	$O_2 \rightarrow$ Mur mistoqsija 13

Table 4 in the report

10. Tagħmel/tagħmlu użu b'mod regolari tal-ilma li jinġabar fil-bir? (Immarka ċirku wieħed biss)

lva	O ₁
Le	$O_2 \rightarrow$ Mur mistoqsija 12

Table 5 in the report

11. Għal xiex tuża/tużawh l-ilma tal-bir? (*Immarka kull fejn japplika*)

Tisqija/Irrigazzjoni	$\square_1 \rightarrow$ Mur mistoqsija 14
Ilma għall-flushing	$\square_2 \rightarrow$ Mur mistoqsija 14
Tindif generali (ħasil tal-art, ħasil ta' karozzi eċċ.)	☐ 3→ Mur mistoqsija 14
Oħrajn (Speċifika)	$\square_4 \rightarrow$ Mur mistoqsija 14

Chart 5 in the report

12. Għaliex ma tużawx l-ilma tal-bir b'mod regolari? (Immarka kull fejn japplika)

II-bir jeħtieg manutenzjoni (eż. inixxi)	$\square_1 \rightarrow$ Mur mistoqsija 14
Il-pompa ma taħdimx	2→ Mur mistoqsija 14
Għandi bżonn iktar informazzjoni dwar kif nuża l-ilma	☐ 3→ Mur mistoqsija 14
tal-bir	
Ma narax il-bżonn għax il-prezz tal-ilma tal- <i>main</i> mhux	☐ ₄→ Mur mistoqsija 14
_għoli	
M'għandix użu għalih	□ ₅ → Mur mistoqsija 14
Oħrajn (Speċifika)	$\square_6 \rightarrow$ Mur mistoqsija 14

Table 6 in the report

13. Ghaliex m'ghandekx/m'ghandkomx bir? (Immarka kull fejn japplika)

Ngħix fi blokka t' appartamenti/ <i>maisonette</i> u m' hemmx bir installat	
Ngħix fi blokka ta' appartamenti/maisonette u	2
_m'għandix aċċess għall-bir li hemm istallat	
L-ilma tal- <i>main</i> huwa irħas meta mqabbel mal-ispejjeż li	3
_hemm bżonn biex tħaffer bir	
Oħrajn (Speċifika)	4

Chart 6 in the report

14. Tafda fil-kwalità tal-ilma fil-fliexken? (Immarka cirku wiehed biss)

lva	O 1
Le	02
Ma nafx	03

Chart 11 in the report

15. Taħseb li l-ilma fil-fliexken huwa għoli meta mqabbel mal-ilma tal-vit? (Immarka ċirku wieħed biss)

Iva	01
Le	02
Ma nafx	03

Table 9 in the report

16. Ġieli għamilt/u użu mill-ilma tal-bowser fid-dar? (Immarka ċirku wieħed biss)

Iva	O ₁
Le	$0_2 \rightarrow$ Mur mistoqsija 18

Chart 7 in the report

17. Tiċċekkja/w l-oriġini u l-kwalità tal-ilma tal-bowser li tixtri/tixtru? (Immarka ċirku wieħed biss)

Iva	O ₁
Le	02

Table 7 in the report

18. Liema apparat, attivatijiet u/jew xogħolijiet tad-dar taħseb li jikkunsmaw l-iktar ilma fid-dar tiegħek/tagħkom? (Immarka sa tliet għazliet u kklassifikahom wara xulxin)

Sink tal-kċina	
Dishwasher	2
Flushing tat-toilet	3
Sink għall-ħasil tal-idejn	4
Banju	5
Doċċa	6
Washing machine	7
Tindif generali (e.ż. ħasil tal-art)	8
Tisqija/Irrigazzjoni	9
Oħrajn (Speċifika)	10

Charts 12, 13 and 14 in the report

19. Taħseb li jinħela iktar ilma meta l-platti jinħaslu fis-sink tal-kċina jew fid-*dishwasher*? (*Immarka ċirku wieħed biss*)

Sink tal-kċina	O1
Dishwasher	O ₂
Ma nafx	O ₃

Table 10 in the report

20. Għandek sistemi ta'water efficient flushing installati? (Immarka cirku wieħed biss)

Iva	01
Le	O ₂
Ma nafx x'inhi sistema ta' water efficient flushing	03

Chart 8 in the report

21. Għandek water efficient faucet/s installat/i mas-sink tal-kċina/sink għall-ħasil tal-idejn? (Immarka ċirku wieħed biss)

lva	O 1
Le	02
Ma nafx x'inhi sistema ta' water efficient faucet	03

Chart 9 in the report

22. Tagħmel/tagħmlu użu mill-'water saving mode' fuq l-washing machine tiegħek? (Immarka **ċirku** wieħed biss)

Iva	01
Le	02
Ma nafx jekk għandix din l-għazla fuq il-washing machine	03

Table 13 in the report

23. Tfittex/tfittxu tikketti/klassifikazzjoni tal-efficjenza tal-ilma meta tixtri/tixtru apparat gdid? (*Immarka cirku wieħed biss*)

lva	01
Le	02

Table 14 in the report

24. Tagħmel/tagħmlu moniteraġġ tal-konsum tal-ilma billi tevalwa/w l-kontijiet maħruga mill-ARMS? (Immarka **ċirku wieħed** biss)

lva	O ₁
Le	02

Table 15 in the report

25. Taf x'inhu l-prezz ta' l-ilma għal kull perjodu li jkopru l-kontijiet? (Immarka ċirku wieħed biss)

Iva	O ₁
Le	02

Chart 17 in the report

26. Taħseb li l-kont tal-ilma tiegħek huwa għali? (Immarka ċirku wieħed biss)

Iva	01
Le	O ₂
Ma nafx	03

Table 11 in the report

27. B'liema metodi li jittestjaw għat-tnixxija ta' l-ilma fid-dar taf? (Immarka kull fejn japplika)

Tbajja/għadajjar tal-ilma li jkunu jidhru	
Sistemi li jagħmlu ħsejjes apposta meta jkun hemm	2
tnixxija minkejja li l-provvista tal-ilma tkun magħluqa	
Figuri ogħla mis-soltu fuq il- <i>meter</i> tal-ilma	3
Il-meter ta' I-ilma jibqa jirreģistra I-konsum alavolja I-	
provvista tkun magħluqa	
L-ebda	05

Table 16 in the report

28. X'taħseb li hi l-ikbar sfida għar-riżorsi tal-ilma f'Malta? (Immarka ċirku wieħed biss)

Nuqqas ta' ħaddiema mħarrġa fil-ġestjoni tal-ilma	0 ₁
Ilma tax-xita li jinġarr lura fil-baħar	02
Numru eccessiv ta' boreholes	03
Tnixxijiet tal-ilma	O ₄
Oħrajn (Speċifika)	- O ₅

Chart 15 in the report

29. Tqis li l-gharghar huwa kwistjoni serja f'Malta? (Immarka cirku wiehed biss)

Iva	01
Le	02
Ma nafx	03

Chart 16 in the report

30. 'New Water' huwa ilma ttrattat minn sistemi ta' gbir u trattament tad-drenagg li jista' jintuża għallagrikoltura, l-industrija, t-tisbiħ tal-pajsagġ u attivitajiet oħra. Issib xi diffikultà bi frott u ħaxix imsoqqi bi 'New Water'? (Immarka **ċirku wieħed** biss)

lva	01
Le	02
Ma nafx	03

Table 12 in the report

Dettalji Demografiċi:

31. Kemm ghandek żmien? (Specifika I-età)

32. Kemm jgħixu persuni fid-dar tiegħek? (Speċifika n-numru ta' membri tad-dar)

Table 2 in the report

33. F'liema lokalità toqgħod? (Speċifika I-lokalità)