ACTION A.4: Stakeholder assessment and perception survey

The main deliverables of this action are:

(i) One report outlining the results of the focus group sessions mapping exercise of water stakeholders and water-users in the Maltese islands, highlighting stakeholder and water users observations and concerns

(ii) One report presenting the results of the stakeholder perception survey on the development of the water sector in the Maltese islands

i) STAKEHOLDER ASSESSMENT, PERCEPTION AND ATTITUDE FOCUS GROUP STUDY

In terms of water usage:

- it was immediately clear that the attitude to tap water for drinking purposes is overwhelmingly negative across all the stakeholder groups. It is important to note that with very few exceptions this resistance is not due to health and safety concerns, but a negative perception based on taste, smell and appearance. In all cases, bottled water is the preferred alternative.

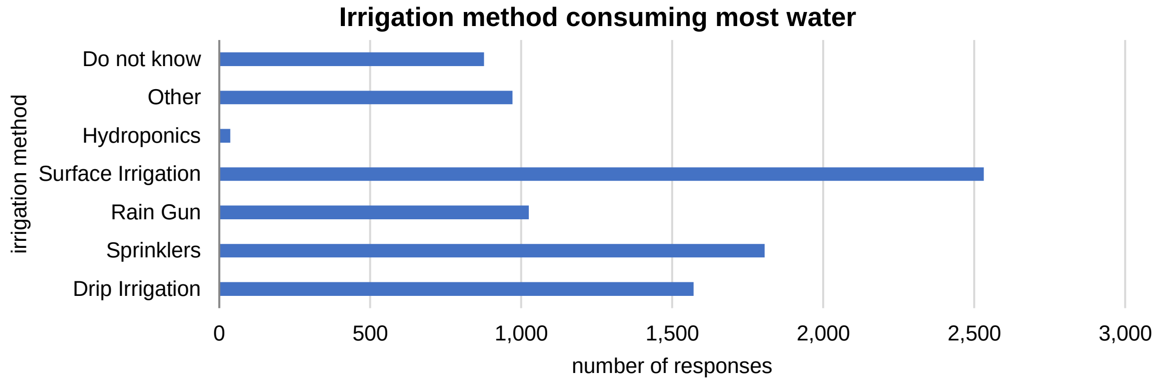
- For the agriculture group groundwater is the obvious main concern. Here, the assessment of the challenges posed by depleted reserves appeared to be well-informed with a number of participants indicating over-extraction through boreholes to be the major challenge. In general, New Water was perceived positively in the vast majority of cases.

- In terms of New Water it should be noted that the residential group had little awareness of this topic, despite public communications issued over the last months in this regard. Once they were informed during the sessions on what this New Water represents, and its source, it was noted that the reaction in the majority of cases was positive. However, it emerged quite clearly that an element of public reassurance may be required to maintain consumer confidence in local agricultural products; this point was also echoed by the agriculture stakeholders.

- In terms of attitudes to water conservation it appears that older residents, foreign residents and younger residents who are either householders or who have environmental concerns are more disposed to taking active measures to conserve water in their homes. A number of participants already do so in various forms indicated in the relevant analysis, ranging from the use of well water to conscious decisions to opt for short showers rather than baths. The motivation varies between primarily economic or environmental, however the point was repeatedly made by the participants themselves that conservation was a win/win situation in terms of managing costs and safeguarding the environment.

ii) PERCEPTION SURVEYS REPORT

<u>Water Survey – Agriculture</u>

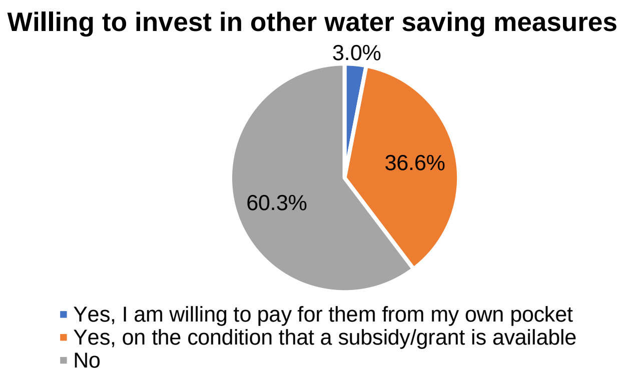


Data collected showed that the majority of holdings, 93.9 per cent do not use 'new water' for agriculture irrigation.

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.

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.



Water Survey – Households

The target population of this survey consisted of all private households in the Maltese Islands.

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 cent .

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 cistern.

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.

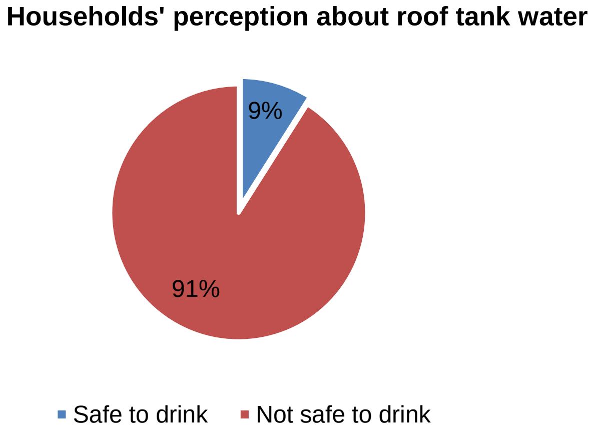
With regards to water for outdoor use, municipal mains water is the dominant type of water (49.2 per cent). Water originating from the roof tank and the well or water cistern comes next with 24.1 per cent and 22.8 per cent of outdoor water usage by households respectively.

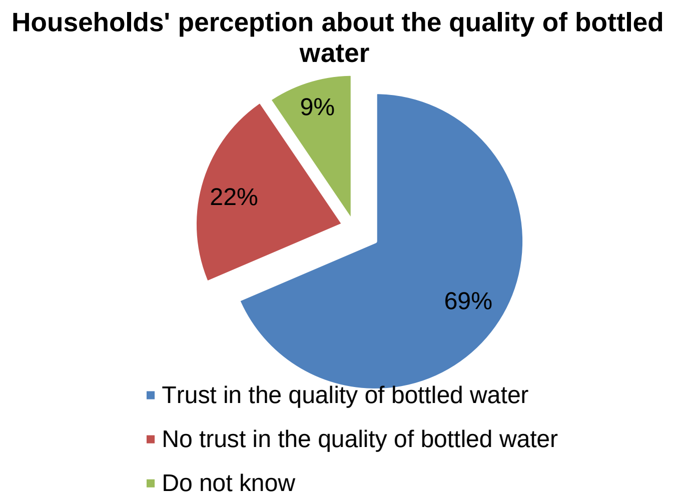
In Malta, 43.3 per cent of households have the availability of a well to collect rainwater.

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.

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.

When considering the roof tank water, only 9.0 per cent of households consider this water as safe to drink. 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.





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).

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.

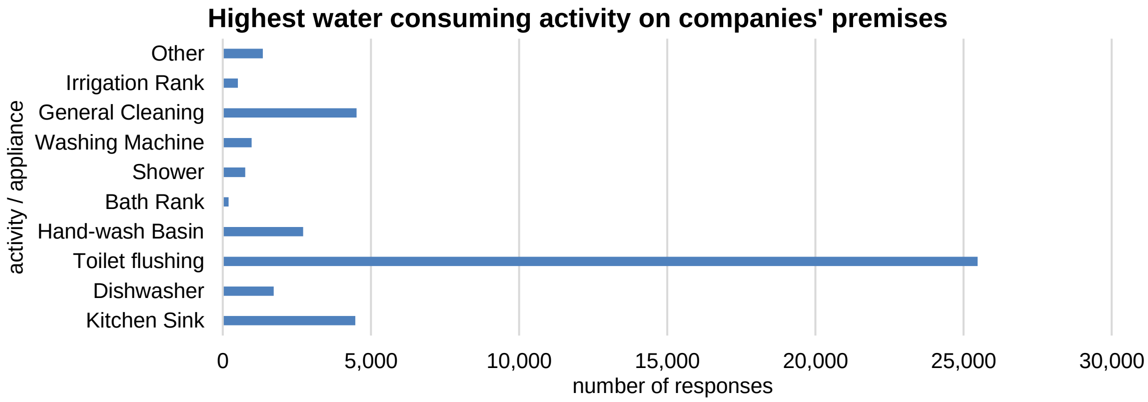
The survey also delved into the behavioural aspects of households with regards to the use of water. Households were asked whether they utilise water saving mode on their washing machine. 56.0 per cent of all households use this feature, followed by 29.3 per cent which do not and 14.5 per cent which are 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.

Water Survey – Businesses

The target population for this survey consisted of all active enterprises excluding those in NACE

A total of 1,500 enterprises were contacted for this survey where 525 participated and data was collected by means of a self-completion questionnaire.

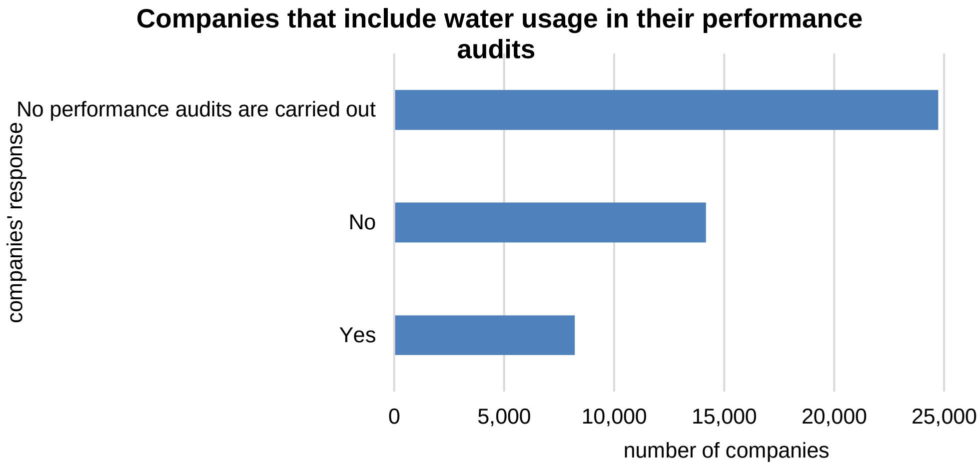
As part of the survey companies were asked to rank applications and activities according to what they believe has the highest water consumption. Applications and activities that companies believe to have the highest water consumption include the toilet flushing (chosen by 52.5 per cent of companies), followed by general cleaning (9.3 per cent) and the kitchen sink (9.2 per cent). Companies reported the second highest consumption for the kitchen sink (18.2 per cent), followed by the hand-wash basin (13.3 per cent) and the toilet flushing (12.7 per cent). With regards the third highest consumption, companies chose the hand-wash basin (11.6 per cent), the kitchen sink (11.5 per cent) and the toilet flushing (9.4 per cent). Here it is interesting to note that the Toilet flushing and the Kitchen sink feature across all the three consumption categories, meaning that the highest share of companies believe that these are the most water consuming applications.



Among manufacturing companies (NACE C) there is interest to use highly polished treated municipal wastewater (New Water) in only 46 companies (1.7 per cent of companies in the same NACE category). The majority (61.8 per cent) are not interested to use this type of water while a further 36.5 per cent do not know or need more information about this subject.

With regards to the 46 companies that are interested to use 'New Water', 8 are willing to pay up to €0.19, 15 are willing to pay from €0.20 to €0.49 and 23 are willing to pay from €0.50 to €0.99 per cubic metre of this type of water.

Companies that carry out performance audits comprise 46.1 per cent of the total. 36.7 per cent of these (8,211 companies) include water usage in their performance audits, whist the rest do not. NACE J - Information and Communication and NACE I - Accommodation and Food Service Activities have the highest share of companies that include water usage in their performance audits (71.5 per cent and 61.5 per cent respectively of companies in each NACE category). On the other hand, NACE F – Construction and NACE B - Mining and Quarrying have the lowest share of companies that include water usage in their performance audits (0.0 per cent and 0.7 per cent respectively).


Companies that include water usage in their performance audits
No performance audits are carried out
No
Yes
companies' response
0
5,000
10,000
15,000
20,000
25,000
number of companies