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Delivery: Shera Bender sbender@aed.org

THE ACADEMY FOR EDUCATIONAL DEVELOPMENT
THE WATER EFFICIENCY AND PUBLIC INFORMATION
FOR ACTION (WEPIA)

OVERVIEW OF ALL KAP SURVEYS

REPORT

April, 2001

Introduction

In this report we focus on the **main issues and offer concrete recommendations**. The findings are based on all surveys, and therefore cover a large sample and variety of the Jordanian population. We will discuss the most relevant themes and then provide marketing recommendations. Finally, the conclusions serve to summarize the main results and outline an overall **strategy to improve water conservation**.

Water supply and conservation

The situation

The cumulative evidence of several surveys portrays a clear picture of water supply and conservation in Jordanian households.

The data indicate that the frequency of water supply is broadly consistent: the majority of respondents receive water supply between 1-2 times per week. This pattern is particularly characteristic of Amman and Irbid. On the other hand, we also observe that most households in Fuheis and Aqaba receive water more frequently, at least 3-4 times per week.

The differences in actual weekly water supply influence respondents' perceptions on whether or not they feel the current level is sufficient. In fact, in both Fuheis and Aqaba, nine out of ten respondents declare that actual supply is sufficient. By contrast, in the locations with less frequent water supply, two-thirds of respondents claim that the present supply is sufficient.

In other words, subjective perceptions of having enough or not enough water are closely linked to objective conditions of weekly supply. This is an important finding because it is precisely these **subjective perceptions that shape behaviour** about water conservation. We will return to this critical issue later.

Nevertheless, the survey results also point out that the vast majority of households have taken steps to conserve water. It is useful to divide these actions into two parts. First, the general action of using water only when necessary. Second, specific actions.

First and foremost, more than one out of two households use water only when necessary. Although this is not a specific action, it is the most important. It is the most important because it implies **a conscious effort to evaluate one's real water needs** and to draw a line between what is necessary and what is not. It is the most important also because it is the foundation of all other actions to conserve water. **Persuasive communication must focus on this pivotal criterion**. It must make people more aware of their real water needs.

It is true that about half of Jordanian households in the sample claim to use water only when necessary. This means that public awareness of a water problem exists and that past communication efforts have done a good job. But there is room for improvement.

Recommendations: We must develop strategies to convince the other half to **become more discerning in assessing their water needs**.

Secondly, respondents claim to resort to numerous specific actions to save water. These are less relevant than an overall shift in mentality and behaviour.

Recommendation: these specific actions are best utilized in the context of promotions and other tactical actions.

Laundry habits

Laundry is a major factor in water use. Virtually all households possess either an automatic or non-automatic washing machine (the majority the latter). About nine out of ten households across the different surveys wash at least once a week.

Laundry is probably one of the **more difficult areas** to convince consumers to use less water. Demographic growth is a primary factor in increasing the use of water for washing machines. Furthermore, the cultural importance of hygiene/cleanliness as well as the normative system that glorifies the housewife's duty to wash clothes are all barriers to water conservation in the realm of laundry.

Recommendation: although laundry is a heavy consumer of water, it is not worthwhile to build a communications/public information strategy around the possibilities of water conservation through laundry management (namely, less frequency). Laundry is an area where people do not want to worry about conserving water because the cultural norms of duty and order are more important. It is better to **focus on other water conservation actions**, ones that do not run against a deeply entrenched socio-cultural resistance.

Cars and gardens

We will first examine the water issue with respect to cars and then to gardens.

Car:

Car ownership across the different surveys ranges from about one half to just over two-thirds of the samples. Car washing is relatively high (compared to countries in Europe or North America). In fact, overall, slightly more than one out of two respondents wash their car at least once per week. Moreover, a significant proportion of the sample washes the car more than once a week. These figures are high on an international level. While dust and sand might explain part of the high frequency, it is probable that cultural factors prevail.

The automobile is not just a utilitarian vehicle for transportation. It is an outward symbol of success and self-control. A nice, clean car is highly valued from a socio-cultural perspective. Car owners in Jordan are highly involved in their car (moreover, automobiles are relatively expensive in Jordan). It is **therefore not surprising that car washing is so prevalent**.

Most respondents resort to buckets to wash their car. This is more labour-intensive but conserves water better than using a hose or going to a car wash. Furthermore, the use of the hose or car wash is higher in the sample locations where there is higher water supply and perceptions of having enough water.

Recommendation: due to the social significance of a clean car, it is not worthwhile to persuade Jordanians to wash their car less frequently. On the other hand, it is possible to convince car-owners to wash with water-savings methods. The bucket is the most conservative method; however, it is rather onerous compared to the hose or the car wash. **The key is to recruit young Jordanian high school students** to do weekend “war washes” using buckets and sponges. Car owners can take their car to be washed by hand by eager youth who can also earn a little money. For the car-owner, it is less expensive than the car wash (a consumer benefit) and it wastes less than the hose (a social benefit); moreover, it employs youth (a strategic issue in Jordan) and can be a platform to build water conservation awareness (for example, the young employees wear t-shirts that say “love Jordan, save water”. They can also distribute leaflets/brochures on how to save water in the home. It is a concrete action that operates according to the effective principles of **“relationship marketing”**.

Garden:

The different surveys show that many Jordanians households have a garden. In fact, the proportions range from about one-half to two-thirds of the sampled households. These are very high figures from an international perspective. In Jordan, the **garden is widespread and very important**.

It is necessary to understand the significance of the garden for Jordanians in order to develop marketing/communication strategies that alter behaviour, such as water usage.

The fact that a relatively large share of households possess a garden is indicative of its importance. Gardens are heavily charged with meaning. They represent a piece of nature in a world that is increasingly urban and concrete. It signifies a primordial relationship between man and nature. In Arab culture, in particular, the garden symbolizes the oasis, a place of rest, an anchor of stability in a world of movement. It is also the garden of pleasure, delight, and the ultimate refuge of privacy.

Recommendation: the garden is a sphere of **involvement** and it is unlikely that Jordanians will want to cut down on water usage for the cultivation of their gardens. It is possible, however, to leverage the high involvement to convince consumers to **become more judicious** in their use of water for the garden. For example, certain plants and trees require less water than others. Support nurseries in promoting such flora. Moreover, tie such **promotions into the overall water conservation marketing strategy.**

Tanks and reservoirs

The vast majority of respondents store water in tanks and relatively few use a reservoir. It is important to note that the use of tanks is not connected to the frequency of weekly water supply. The propensity to collect rain water varies, however, by municipality.

We observe, for instance that 43% of households collect rainwater in Irbid and only 6% in Amman and 5% in Aqaba.

Recommendations: The statistical discrepancies are significant and require further examination. The annual rainfall is perhaps different among the sites, but not to the extent as the use of a means to collect rain water. It is, therefore, necessary to scrutinize possible intervening variables. The key question is: **what makes the inhabitants of Irbid collect rainwater?** A likely hypothesis is that they are closer to nature. At first glance, this might appear odd; however, on analysis of the data, we note that the inhabitants of Irbid are much more likely to cultivate a garden (and they water their gardens less frequently than the people of other locations). They are, in other words, more aware of natural cycles and the benefits of collecting rainwater. It is recommended that **this sensitivity be studied and promoted.**

Plumbing fixtures, leakages, and repairs

Most households, on average, across all surveys have about five faucets inside the house and one outside. In general, people are satisfied with their faucets and do not report excessive problems. Nonetheless, the data show that almost a third of the respondents **feel lost** (lack of time or knowledge) when it comes to repairs.

The data on toilets and showers indicate a low level of leaks.

Nevertheless, across all water outlets in the different surveys, one can conclude that Jordanian citizens **feel incapable of managing** any leaks or problems themselves. The majority of respondents rely on a plumber to fix the problem.

Recommendation: it is clear that an integral part of a water conservation program would need to include **information on how to maintain/repair** faucets and water tanks. Technically, these are not difficult and can be diffused in the population at large. It is necessary to promote information on how to handle basic repairs with water outlets. We recommend to provide such information in addition to the addresses of all retail outlets that sell parts and other hardware for repair. It might reduce the business of plumbers, but it will increase public welfare by providing **lower-cost solutions**. Furthermore, such information platforms can be linked directly to an overall social marketing campaign to conserve water in Jordan.

Water billing

Although slightly over half of respondents claim to pay as much as consumed, a third overall across all surveys maintain that they pay more than consumed.

These results are point out the possibility of **a gap between what consumers perceive to be their water usage and how much they must pay**. Generally speaking, when there is a dissociation between cost and quantity consumed, there is greater negligence when it comes to water conservation. In particular, the incentive to save water declines when the consumer does not see a tangible cost benefit to such sacrifices.

Recommendations: it is necessary to provide more **concrete economic incentives** to save water. For example, it is useful to demonstrate to the consumer that saving X amount of water per month reduces the water bill by Y amount. This will encourage people to be much more careful. Furthermore, it is possible to introduce discounts for the application of specific water-saving devices and methods. Basically, in both cases, it is necessary to link water conservation to a precise reduction in water bills. Such information **is highly persuasive and effective**.

Water saving devices

The application of these devices has a huge potential. Across all surveys, the majority of respondents declare that they would **be willing to use such devices**, especially aerators on faucets. Of course, we must be aware that intention to use figures are probably inflated; but, nevertheless, there is room to expand the usage of such devices.

Recommendations: **Awareness** of water-saving devices is reasonably **high** (moreover, it cuts across all age groups and whether one has a tank or reservoir). Nonetheless, it would be worthwhile to boost awareness through advertising and information campaigns (especially through schools, workplace, and public gathering places).

The big challenge, however, is to **convert awareness into usage**. This requires more than communication. In fact, it demands a serious effort to create economic incentives to encourage people to include such devices in their homes. There must be a system for demonstrating **how water savings is translated into a smaller water bill**. To say that a particular device saves a certain number of gallons of water appeals only to the most ecologically-sensitive people, a minority. In order to reach the mainstream population, it is necessary to show how the gallons of water saved translate into a smaller water bill at the end

of the pay period. This is especially relevant because the data show that the willingness to adopt such devices rises with an increase in the amount paid per cycle. Moreover, special efforts must be directed toward younger households because they are the least willing to install such devices.

Conclusion

The survey results are conclusive. There **is a real need to develop a special water-conservation communication program**. Most Jordanians realize that there is indeed a shortage of water and that conservation is beneficial. The present studies have **demonstrated exactly where to place an emphasis in order to maximize strategies of persuasion**.

The greatest marketing effort must be devoted to instigating **a fundamental attitude shift**. Namely, it is suggested to focus on how individuals and households define the fine line of demarcation between necessary and superfluous water usage. We need to develop communications and incentives that convince people to monitor their own habits and water usage. We need to demonstrate to people that “less is more” if applied appropriately.

This forces us to enter the realm of **“lifestyle marketing”**....whereby communication arguments are based less on specific consumer benefits and more on a general approach to life. The idea is to modify how people relate to water usage in a deep, pervasive manner. For instance, advertising can portray aspiring characters who naturally conserve water as part of their “way of life” (just as they take care of their health, beauty, or finances). The main message is to create a **“new mindset”** that is naturally and spontaneously inclined to save water. The specific methods and devices for water conservation are derivative of this new mindset.

Upon review of the data, it is clear that this is the most effective way to **trigger a mental and behavioural shift** of the Jordanian population with respect to water usage and conservation.

We have also seen in the data that there are spheres of the daily lives of Jordanians where we might not want to alter habits. It is critical to illuminate such spots because they prevent us from wasting precious marketing resources.

For example, it would be difficult (and probably counter-productive) to try to convince housewives to restrict laundry. Although this consumes a lot of water, it is socio-culturally important to do lots of laundry frequently. It is part of a strong normative system, and this cannot be modified easily.

Similarly, we have seen that the sample respondents wash their cars frequently. This practice also wastes water. Yet, at the same time, the automobile is so important. It would be counter-productive to try to persuade Jordanians to wash their car less often. On the other hand, the data reveal that there are different ways to wash a car, some more economical than others. **There is a real opportunity to create** alternative “car washes” that employ youth and buckets. Such an action could have tremendous effects. It can create a really positive image around the whole issue of saving water. Young people can become proud to do this on their weekends. For them, it is also a way to socialize and even earn a little bit of money. Clever marketing can turn such an action into a real fashion among youth. It resonates with **contemporary youth values**: having fun, learning to be independent, and doing something to make the world better.

We have also seen the central importance of the garden in Jordan. This is very critical. Garden cultivation requires a lot of water and it is a location of deep symbolic value. In this case, we see the relevance of direct campaigns with nurseries to convince customers to purchase plants

that require less watering. We cannot ask the Jordanian garden-owning population to water less. We must concentrate on convincing them that one can cultivate a luxuriant garden with plants that require less water. The point is to show how to **enhance private pleasure and public good**. Once again, this involves attitude change;

Along similar lines, we must focus on ways to link water conservation with a reduction in the water bill. The simple demonstration of how **a reduction of water usage leads to a reduction in expenditure is a very powerful communications argument**.

This must include overall water bill reductions as well as specific discounts or rebates for the installation of water-saving devices. The basic point is to bring Jordanian water consumers to the realization that they can do concrete things to save water. This is an appeal to what we can label as **“pragmatic ethics”**.

Therefore, **the bottom line of this analysis** is that it is time to focus on **serious social marketing efforts**.

It is important to change the mindset of Jordanian water consumers. This will induce a deep change in behaviour. The data indicate that the terrain is favourable. **The Jordanian people are willing to make personal sacrifices to stand behind an issue that is so important for Jordan.**