Consumption Patterns in Arab Countries

AFED Public Opinion Survey

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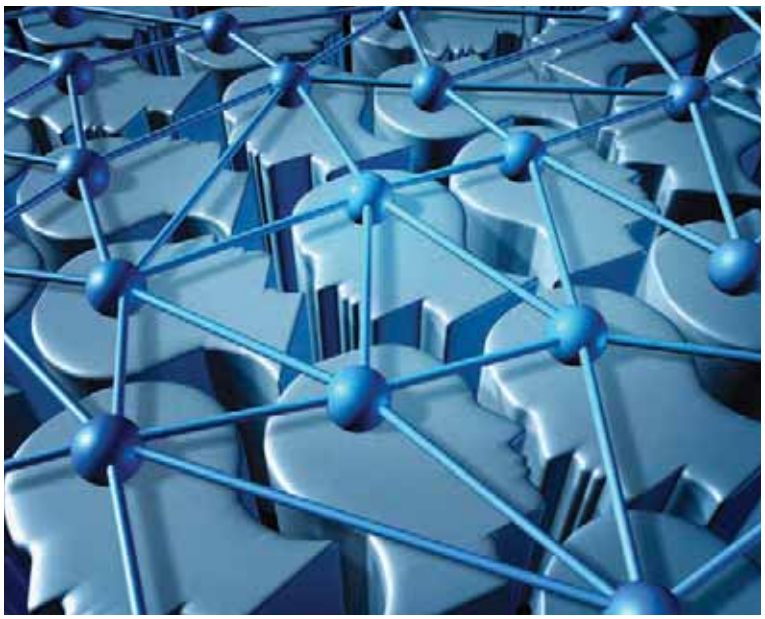
I. SUMMARY OF RESULTS

The Arab public is ready to pay more for energy and water and embrace changes in consumption patterns if this will help preserve resources and protect the environment, according to a survey carried out by Arab Forum for Environment and Development (AFED) in 22 countries. However, good intentions and wishes of the public, as demonstrated in the survey results, are not enough, as putting change into action requires the introduction of appropriate enabling conditions by governments. While public awareness and education are important tools to demonstrate the benefits of sustainable consumption on human health and the environment, regulations and incentives are indispensable to transform intentions into action. Implementing energy and water conservation measures on a large scale requires revising subsidies. Renewable energy will not be deployed extensively as long as conventional fuels are sold at fraction of their real market price. Equally, phasing out subsidies needs to be accompanied by direct economic and social benefits, mainly job creation, providing education and health coverage, alongside securing appropriate income levels and pension schemes.

When a vast 84% majority of the people accept to eat more fish than red meat, which is better for the environment as well as health, the fact remains that good intentions cannot be transformed into action until fish is made available in abundant quantities and at affordable prices.



As safeguarding the environment and ensuring sustainable management of natural resources are the main driving concerns for consumption patterns, the survey also examined public attitudes regarding some general environmental challenges, focusing on water, energy and food. This allowed comparison with previous surveys carried by AFED on public opinion attitudes towards environmental challenges in 2006 (AFED Survey, 2006), and on climate change in 2009 (AFED, 2009). Comparison was also made with a survey carried out by Al-BiaWal-Tanmia (Environment & Development) magazine in 2000 (EDM, 2000).

A. Environment Outlook

Among the 31,000 people surveyed in the 22 members of the League of Arab States, 72% indicated that the environmental situation in their countries worsened over the past 10 years. This constitutes a remarkable 20% increase over the negative classification in 2006, which then stood at 60%. It is interesting to note that the 2006 results showed a big improvement over 2000, when 85% said that the environmental situation worsened. This means that what the Arab public saw as a gain for the environment between 2000 and 2006 was wiped out between 2006 and 2015. The biggest drop in confidence was recorded in countries that witnessed wars and conflicts. Tunisia presents a salient example, as in 2006 it recorded the highest percentage of people who thought the environment became better (54%), while in 2015 this dropped to just 4%, with 84% saying it worsened and 12% saying it has not changed. Across the region, an average of 82% thought that governments were not doing enough to tackle environmental challenges. The majority of those dissatisfied were in Lebanon, Palestine and Sudan (over 90% in the three countries). The percentage of those who thought their governments were doing enough for the environment reached 29% in the Gulf Cooperation Council countries (GCC), representing the highest level in the region.

Solid waste management, traffic congestion and inefficiency of water and energy use scored as the top environmental challenges, followed

by industrial pollution, air quality, wastewater disposal and food safety. While top 10 priorities remain the same in 2015 as in 2006, it was remarkable to see that traffic congestion moved from position 11 to position 2, which reflects the mounting gravity of road overcrowding and inadequate public transport systems in the Arab region.

As to the impact of climate change, 88% indicated that this posed a real threat to their countries – a 5% increase over those who answered likewise in 2006. We believe that the extreme weather conditions witnessed in some parts of the region over the past years, including cyclone Gonu in Oman, recurrent untimely heavy rainstorms in Gulf countries and extended droughts in other parts of the region, were major contributors to this shift in responses. Stronger scientific evidence and better public awareness about climate change also should also have contributed to this result.

B. Consumption Patterns

The AFED Sustainable Consumption survey revealed acceptable levels of public awareness on environmental matters related to consumption patterns. While 72% of the respondents were aware that the Arab region was the world's poorest in water resources, 77% knew that the level of water and energy consumption in some Arab countries is among the highest. Asked to identify the main reason behind high water and energy consumption at the household level, a majority of 46% attributed the wasteful behavior to lack of awareness. A mere 6% put the blame on subsidies, with the highest scores as compared to the regional average coming from Oman, the United Arab Emirates and Kuwait (46, 19 and 18%). This can be explained by the fact that the three countries witnessed heated debates on the issue over the past two years, with officials endorsing phasing out of subsidies. The strongest statement against subsidies came from the Omani minister of oil and gas, who declared in 2013 that "what is really destroying us right now is subsidies…we simply need to raise the price of petrol and electricity" (Al-Yaum, 2013,http://www.alyaum.com/News/art/103930.html).

Another example showing that informed official positions help shape public opinion is that 85% of the respondents said they used energy-saving lamps, while only 45% used water-saving devices at home. This is a result of the intensive programs which made energy-saving lamps available and easily accessible in the markets, including the distribution of free energy-saving bulbs in Egypt, Morocco, Lebanon and the UAE. This was in contrast to meager marketing support for water-saving devices.

As a follow up, participants were asked whether they were ready to pay more for water, electricity and fuel if this contributed to more sustainable use of natural resources. The question made the proposition conditional on compensating higher prices (as a result of phasing out subsidies) by offering direct benefits including higher salaries, better job opportunities, education, health and pension. 77% agreed to pay more when it came as part of a package, compared to a mere 6% who attributed the waste in water and energy use to subsidies. This presents a clear indication that people accept change as a package supported by the right enabling conditions, including appropriate incentives.

Efficiency was the most important driving factor for most respondents (42%) when buying a car or electrical appliance, which reflects more concern about saving energy. Brand name and price consecutively followed. Fuel and electricity saving was of less concern in countries where prices are highly subsidized, reaching a low of 16% for cars in Qatar, compared to a high of 72% in Jordan. It is worth to note that Jordan was a regional pioneer in promoting hybrid and fuel-efficient cars, through offering a tax-break program. At sub-regional level, efficiency and price were lower factors in the GCC countries, while brand, model and size had a higher rank. Although Saudi Arabia was the first Arab country to introduce fuel economy labeling and standards for imported vehicles in 2014, the impact of this measure on consumers is still to be seen.

The survey revealed that an equal percentage of respondents used private cars and public transport as the main means of mobility (47% for each), with the remaining 6% using motorbikes and bicycles. The extensive use of private cars in the GCC countries – about 89% on average – is explained by higher income levels, very low fuel prices, and a lack of modern public transport

systems. Lebanon was an exception to the other Arab countries, with a staggering 72% using private cars – a reflection of inadequate public transport systems. While 82% of respondents at the regional level agreed to share a personal car with others to go to work, attaining such a scheme on a large scale can only be possible when supported by programs for car-pooling, allocating strategically-located public areas for drivers to meet and share cars.

A majority of the respondents (89%) said they were aware that Arab countries import half of the basic food products they consume, and 88% preferred locally produced food over imported food. Frequency of fast food consumption revealed uniform moderate patterns, with 61% buying fast food 1-5 times per month, and 21% not eating fast food at all. Those who buy fast food more than 6 times a month in the region amounted to 18%, compared to 24% in the GCC countries alone.

Cost of food constituted the largest portion of the family income, compared to water and energy. 62% of respondents spent over 10% of their income on food, while only 4% of respondents spent this same proportion of their income on water and electricity.

Changing dietary habits is a crucial issue, involving intricate social and cultural values and traditions. Dwindling water resources is likely to prevent countries from producing enough quantity of a certain traditional crop, like rice, for an ever growing population. The same applies to red meat, as raising cattle is a water-intensive activity. Moreover, cows produce a particularly high level of greenhouse gases, which intensifies climate change. Are people ready to shift to other products that are less water intensive and friendlier to the environment, such as alternative grains, fish and poultry? If the change in dietary habits would protect the environment, 84% of the respondents were ready to go for it. An astounding majority of 99% would change their habits if this would ensure their health, such as fighting obesity, diabetes and blood fats. Taking into consideration that what is better for the health is better for the environment, as most cases show, the results might indicate that a good approach to promote positive change in food consumption patterns is to put more emphasis on the health benefits, as these are more appreciated by the public.

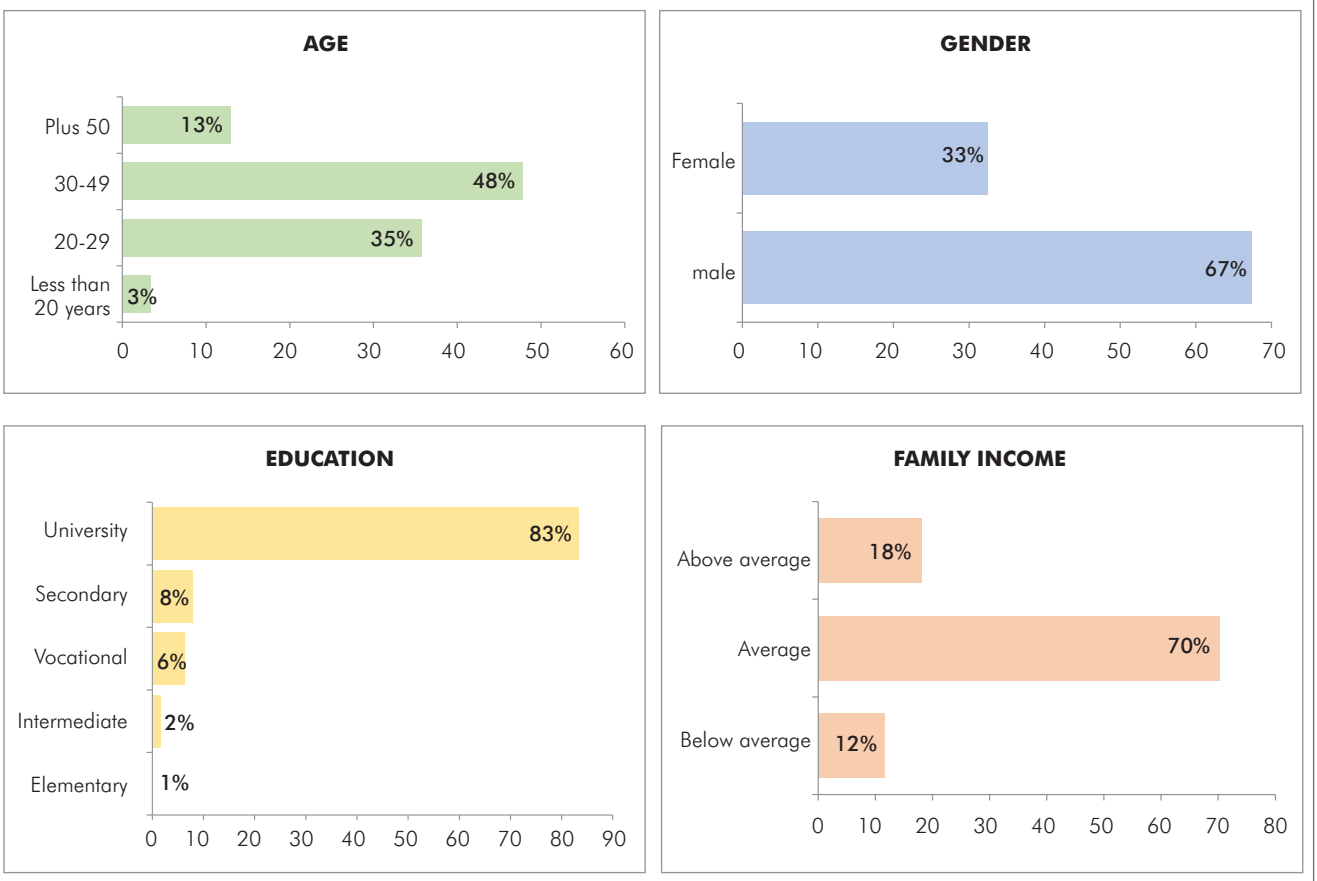
The main conclusion of AFED's public opinion survey on sustainable consumption patterns is that the Arab public is ready to endorse and implement profound changes in the way water, energy and food are consumed, provided that the shift is combined with appropriate enabling conditions and incentives. Alternative products and practices can only be popularized through measures that make them attainable and accessible at competitive prices.

II. DESCRIPTION AND BACKGROUND

As part of its 2015 annual report on Sustainable Consumption in Arab Countries, the Arab Forum for Environment and Development (AFED) carried out a public opinion survey to examine consumption patterns and the willingness of people to change. The survey, which covered the 22 member countries of the League of Arab States (LAS), comprised 27 questions and focused on water, energy and food. The survey was conducted online between January and May 2015, on a voluntary basis and without interviewers. In order to simplify participation, the questionnaire was made available through Google Forms, which could be opened on all types of computers, tablets and smart phones. The survey was conducted in cooperation with Al-BiaWal-Tanmia - Environment & Development magazine (EDM), and promoted by 10 regional newspapers. The promotion campaign to attract participants was also designed to help disseminate awareness on sustainable consumption. Social media, particularly Facebook, was widely used to attract participants.

Valid entries amounted to 31,010 from 22 countries. Only one entry was kept in cases of multiple responses coming from the same name or email address. In addition to total results for the whole region, the statistical report calculated sub-regional results, according to the following geographical classification: Levant (Iraq, Jordan, Lebanon, Palestine and Syria): Gulf (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen); North Africa (Algeria, Libya, Mauritania, Morocco, Tunisia); Nile Valley

FIGURE 1 SOCIO-ECONOMIC DISTRIBUTION OF THE SAMPLE



(Egypt and Sudan); African Horn (Comoros, Djibouti and Somalia). Results of individual countries were analyzed to detect cases of sharp differences, which might pinpoint a peculiar situation. Responses from Comoros and Djibouti were less than 100, and thus considered not a large enough sample to be analyzed separately.

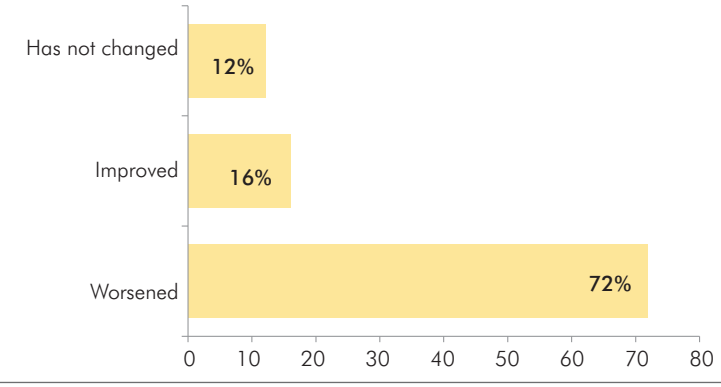
The questionnaire started with introductory questions to determine the position on general environmental issues. This helped to compare results with previous surveys carried by EDM and AFED in 2000, 2006 and 2009. The second set of questions was designed to determine the level of knowledge of respondents regarding the situation of energy, water and food in Arab countries. The third set focused on identifying specific patterns of consumption, and the fourth aimed at finding out to which extent respondents were ready to change their consumption habits in order to help protect the environment and conserve natural resources.

Promotion through newspapers and social media expanded the reach of the survey to a wide range of social, economic and educational backgrounds that reflected a broad spectrum of views. It is to be noted that, due to the voluntary nature of the survey, the regional sample included a high proportion of educated people, urban dwellers and males. While this might not proportionally reflect the actual social mix, it reflects more the views of those nearer to decision making.

The respondents have the following major characteristics: 39% are less than 30 years old, 48% between 30 and 50 years, and 13% above 50 years; 67% are males and 33% females; 83% are university graduates; 70% have an average income compared to the income level in their

country, while 18% are above average and 12% below average; 73% live in urban areas, 16% in villages and 11% in suburban. While 90% of the respondents use tablets or smart phones, only 63% said that social media influence their consumption patterns. As socio-economic factors were taken into account in analyzing the sample, it was possible to track differences in attitudes among various categories.

FIGURE 2 HOW DID THE ENVIRONMENT CHANGE IN 10 YEARS?



III. ANALYSIS OF RESULTS

A. General

1. *How did the environment change in 10 years?*

The majority of respondents, 72%, thought that the environmental situation in their country worsened over the past ten years. 12% said that it did not change, and 16% that it improved. This is a slight improvement over an EDM survey in 2000, which showed that 85.5% thought the environment became worse and 14.5% said it became better. However, it represents a setback compared to the results of AFED 2006 survey, when 60% said the environmental situation had worsened. In the current survey, some countries strikingly stood out of the regional average. In seven countries, the percentage of those who thought the environmental situation deteriorated was higher than the regional average: Syria (94%), Yemen (88%),

FIGURE 3 HOW DID THE ENVIRONMENT CHANGE IN 10 YEARS?

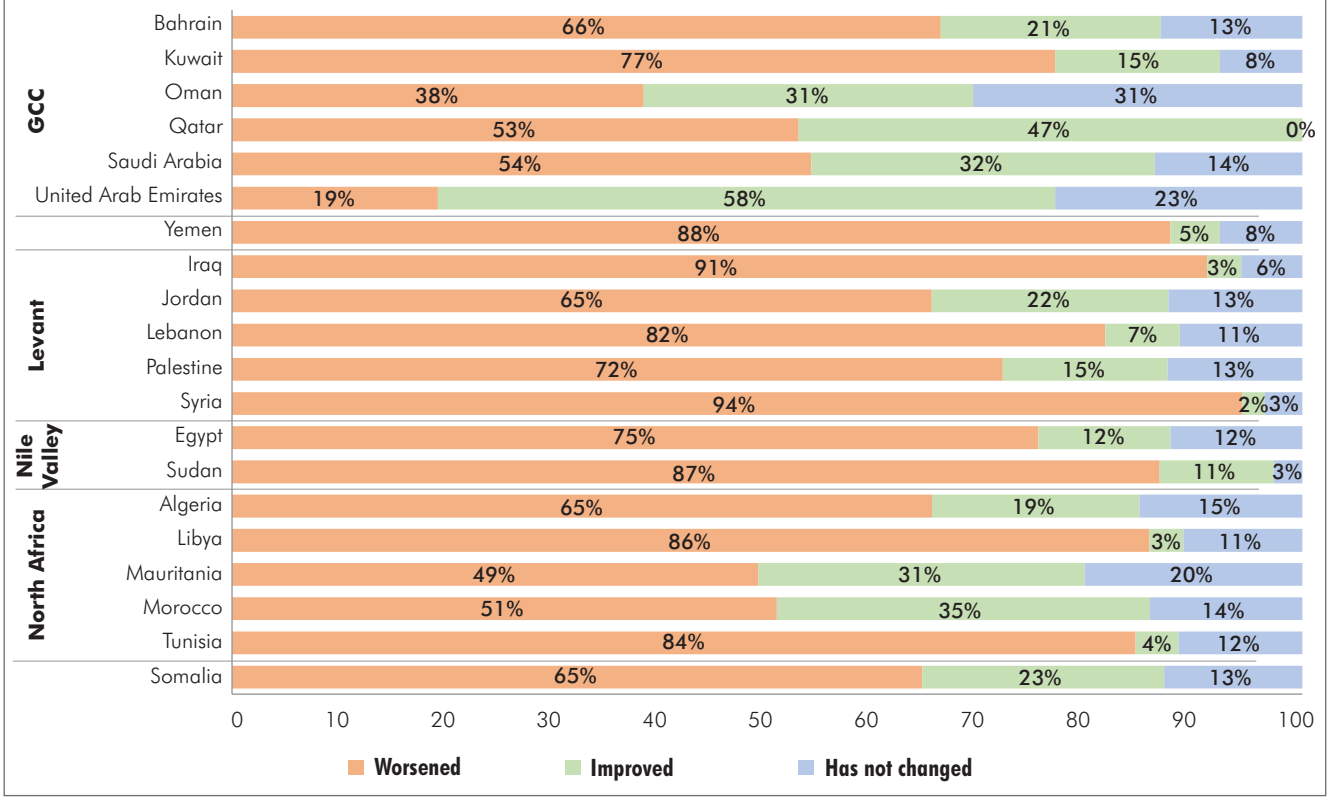
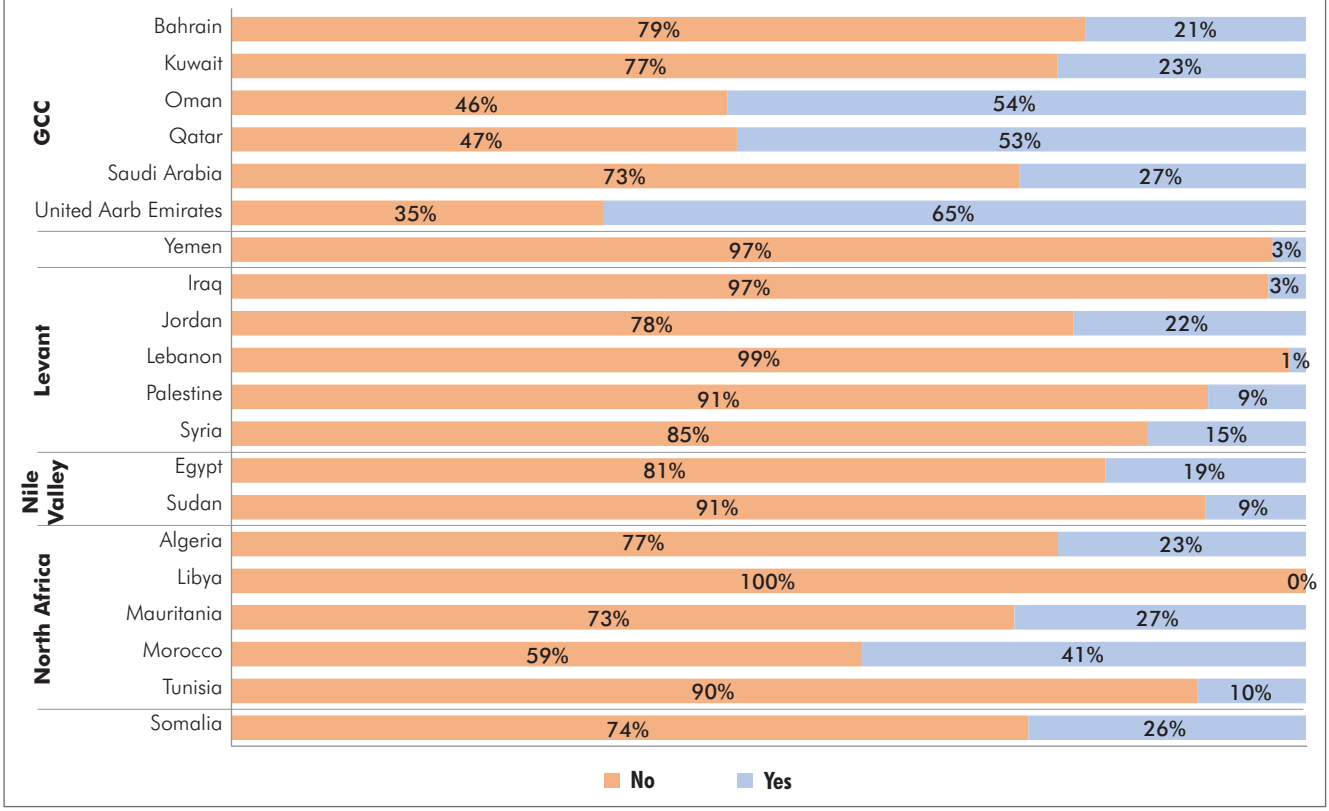
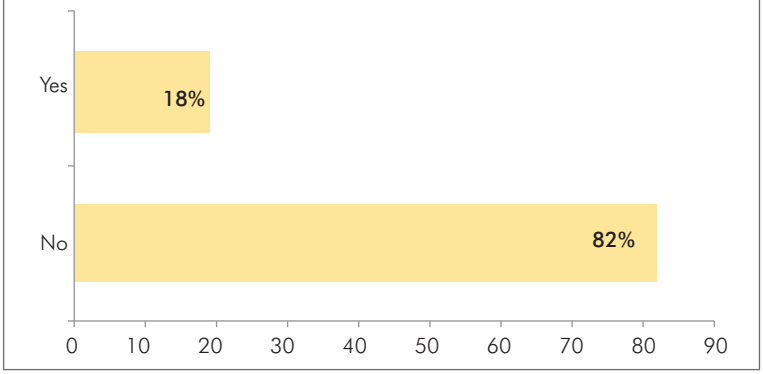


FIGURE 4 IS THE GOVERNMENT DOING ENOUGH TO SOLVE ENVIRONMENTAL PROBLEMS?



Sudan (87%), Libya (86%), Tunisia (84%), Lebanon (82%) and Kuwait (77%). It is interesting to note that these are all countries that have suffered wars and conflicts. On the other extreme, in three countries, the percentage of respondents who said that the situation became better was higher than regional average: UAE (58%), Qatar (47%) and Morocco (35%). While positive answers in some countries might reflect genuine belief that the environment improved, it might in other instances be a reflection of a lack of accurate information or the result of mixing between high standards of living and good health of the environment.

FIGURE 5 IS THE GOVERNMENT DOING ENOUGH TO SOLVE ENVIRONMENTAL PROBLEMS?



2. *Is the government doing enough to solve environmental problems?*

82% of the respondents said that their governments were not doing enough to solve environmental problems, while 18% thought that governments were doing a satisfactory job. Negative responses, which were much higher than the regional average, pointing to unsatisfactory work of governments, were recorded in Lebanon (99%), Palestine (91%) and Sudan (91%). The highest percentages of those who were satisfied with what their

governments were doing for the environment came from the UAE (65%), Oman (54%) and Morocco (41%).

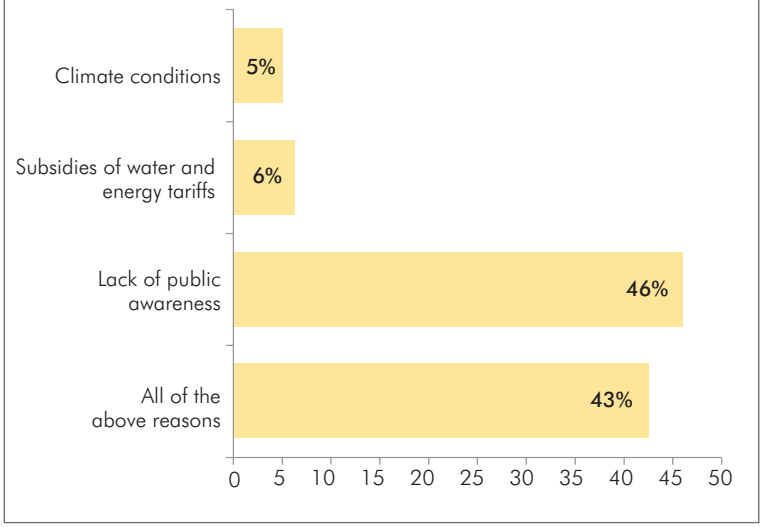
3. *Most important environmental problems*

At the regional level, three problems scored highest as environmental priorities: solid waste (16%), traffic congestion and transport systems (14%), and inefficiency in water and energy use (12%). Those were followed by industrial pollution (10%), quality of sanitary and wastewater disposal systems, air quality and food safety (9% each). The combined regional averages concealed differences at the country level: industrial pollution scored higher in Oman, Bahrain, Morocco, Qatar and Tunisia, while marine pollution ranked high in Bahrain, Oman and Somalia. At the sub-regional level, food safety featured among the top three priorities in the Nile Valley and African Horn, while it scored low in the GCC countries and North Africa.

4. *Threat of climate change*

In response to a question on whether or not climate change poses a real threat to the country of the respondent, 88% said yes and 12% said no. In comparison, a survey carried out by AFED in 2009 recorded 84% yes and 16% no. This represents 5% increase in six years in those who believe that climate change represents a real and direct threat to them. There were no sharp differences recorded among sub-regions. Oman stands alone with 100% of the respondents saying that climate change poses a threat to the country, which might be attributed to the Omanis' devastating experience with Cyclone Gonu in 2007.

FIGURE 6 MAIN REASON BEHIND HIGH WATER AND ENERGY CONSUMPTION



B. Water and Energy

5. *Do you know that the Arab region is the poorest in the world in natural water resources?*

72% said they were aware that the Arab region is the poorest in the world in renewable fresh water resources, while 28% were not. The highest percentage of those who said they didn't know was in Algeria (43%) and Iraq (42%), while all Gulf countries recorded a higher than average awareness level of freshwater scarcity. This reflects the situation in the Gulf countries, which are increasingly dependent on the desalination of seawater to meet their basic water needs.

6. *Do you know that individual consumption of water and energy in some Arab countries is among the highest in the world?*

A remarkable 77% of the respondents said they were aware that levels of per capita consumption of water and energy in some Arab countries rank among the highest in the world. The highest scores came from the UAE (92%) and Kuwait (90%).

7. *What is the main reason behind high water and energy consumption?*

Participants were asked to choose one main reason for the high per capita consumption of water and energy in Arab countries from among: climate conditions, lack of public awareness, water and energy subsidies, or all of these factors together. Lack of public awareness scored highest, at 46%, while 6%

thought the main reason was high water and energy subsidies, and 5% attributed the high consumption to harsh weather conditions. 43% thought the cause was a combination of the three factors. The highest percentage of those who singled out subsidies as the main factor came from Oman (46%), the UAE (19%) and Kuwait (18%). This can be explained as a reaction to the strong position about the negative effects of subsidies on the national economy, publicly adopted by high officials in the three countries over the past two years.

8. *Do you use water-saving devices at home?*

The answers on whether respondents use water-saving devices at home do not necessarily reflect the willingness to use them, as much as their availability in certain markets. At the regional level, 45% said they used water-saving devices, and 55% did not. The highest scores came from countries undertaking programs to promote water-saving and where devices are available in the market, such as Oman

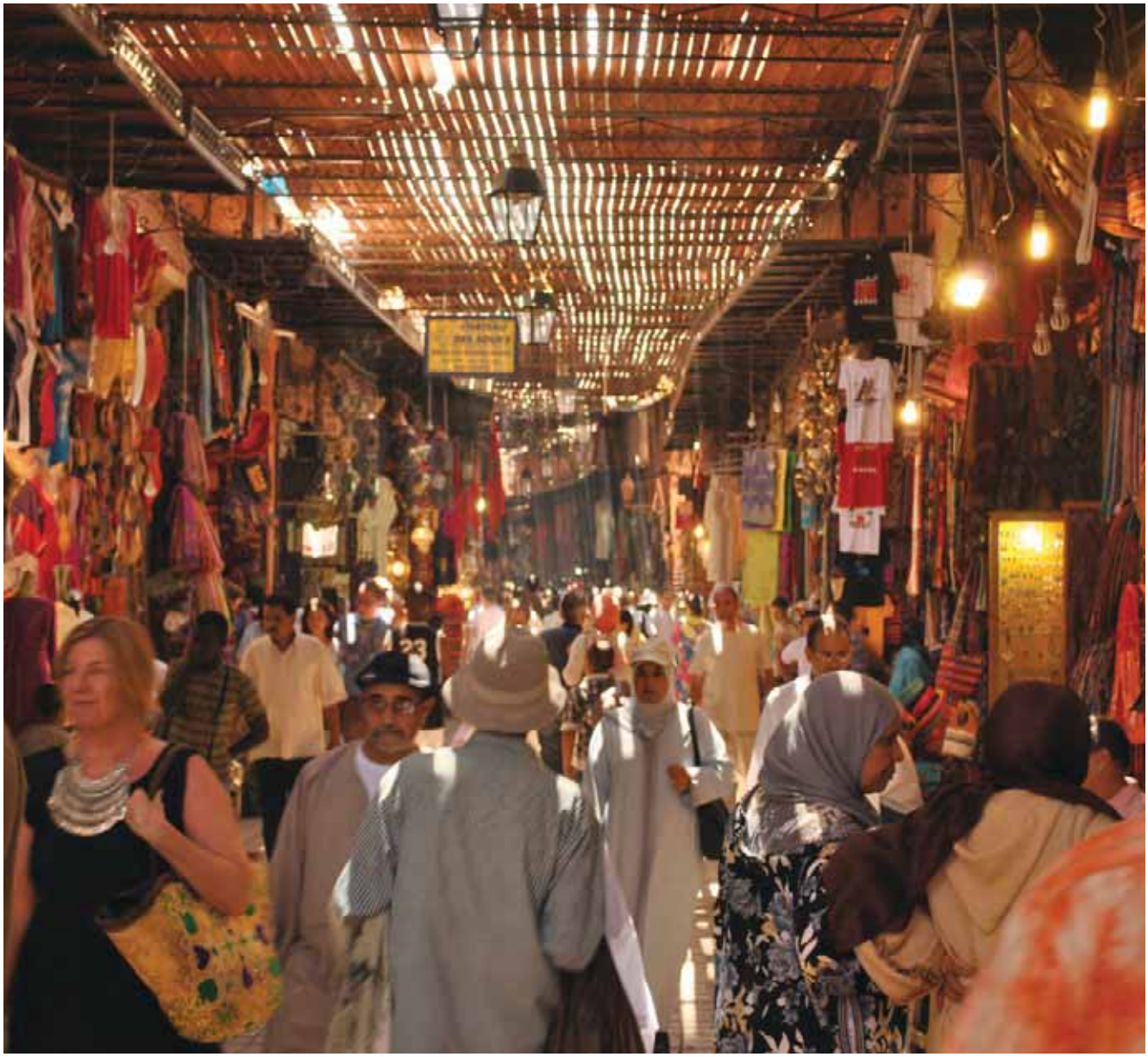
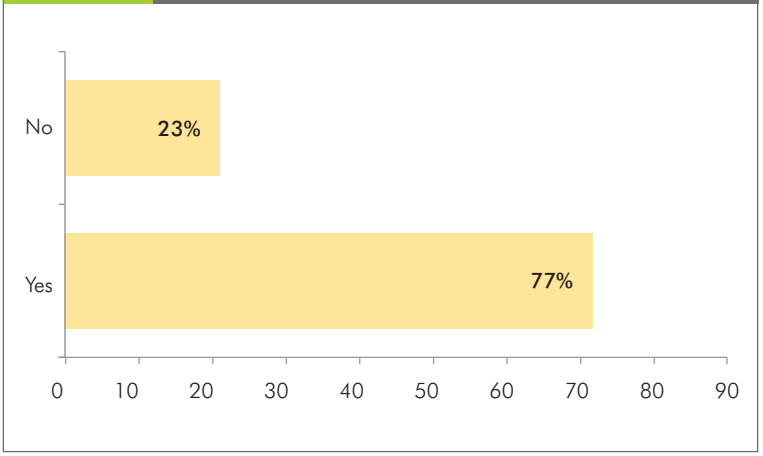


FIGURE 7 **DO YOU ACCEPT TO PAY MORE FOR WATER, ELECTRICITY AND FUEL IF THE INCREASE IS COMPENSATED BY DIRECT SOCIAL BENEFITS?**

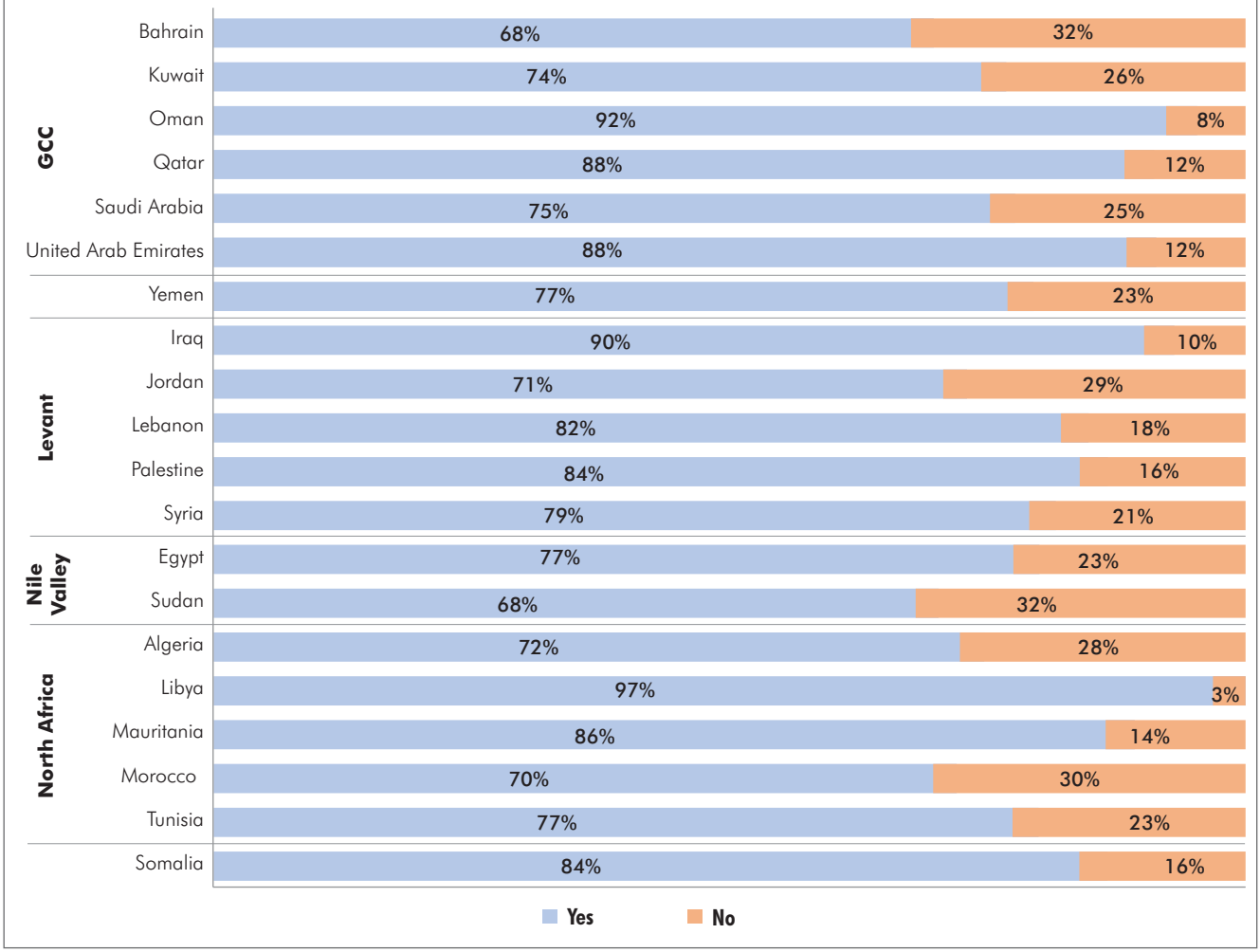


(69%), Jordan (63%), Bahrain (54%) and the UAE (50%).

9. *Would you accept to pay more for water, electricity and fuel if the increase is compensated by direct social benefits?*

The question was specifically structured to balance between phasing out of subsidies and compensating with additional social benefits such as education, health insurance and adequate pensions. In response, 77% accepted while 23% rejected. Results reflected uniformity of responses among sub-regions and countries. An interesting observation was that the highest percentage of those who

FIGURE 8 **DO YOU ACCEPT TO PAY MORE FOR WATER, ELECTRICITY AND FUEL IF THE INCREASE IS COMPENSATED BY DIRECT SOCIAL BENEFITS?**



rejected to pay more for energy and water was in the GCC countries (26%). Although this is only slightly higher than the regional average and other regions (25% in the Nile Valley and North Africa and 18% in the Levant), it shows that higher income does not necessarily mean that consumers are ready to pay more for environmental conservation.

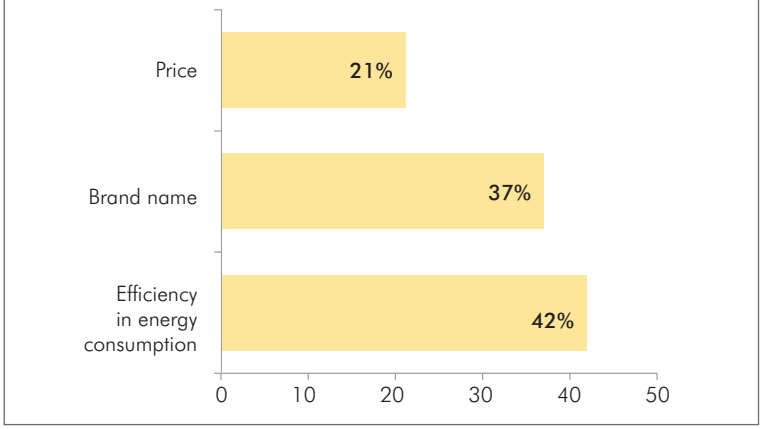
10. What is your main concern when you buy an electrical appliance?

Respondents were asked to choose their main concern when buying an electrical appliance, from among three factors: brand name, efficiency in energy consumption and price. Efficiency was chosen by 42%, which reflects growing concern in the region about saving electricity, and wider availability of efficient appliances. 37% chose brand name, and 21% chose price as main factors. The lowest percentage of those who buy electrical appliances based on efficiency was recorded in Qatar (9%) and the highest in Tunisia (57%) and Jordan (56%). This reflects the importance of adopting Minimum Energy Efficiency Standards (MEPS) for electrical appliance by governments. It is likely that Tunisians ranked high because of the rigorous energy efficiency policies adopted by the government.

11. Do you use energy-saving lamps?

Results showed that the use of energy-saving lamps (like CFL and LED) is increasing in Arab countries, as 85% of the respondents use them. This reflects the wider availability of energy-saving lamps in the market, with easy access to consumers. It also reflects the global trend, as major suppliers have cut off the production of conventional lamps. Saudi Arabia and Qatar recorded low levels of domestic use of energy-saving lamps (35%), which is likely due to heavily subsidized electricity prices. On the other hand, high levels came from Jordan and Syria (95%), Egypt (94%) and Lebanon (91%), countries which undertook energy-saving initiatives in the past years, including programs to promote energy-saving lamps and making them available to consumers.

FIGURE 9 MAIN CONCERN WHEN YOU BUY AN ELECTRICAL APPLIANCE



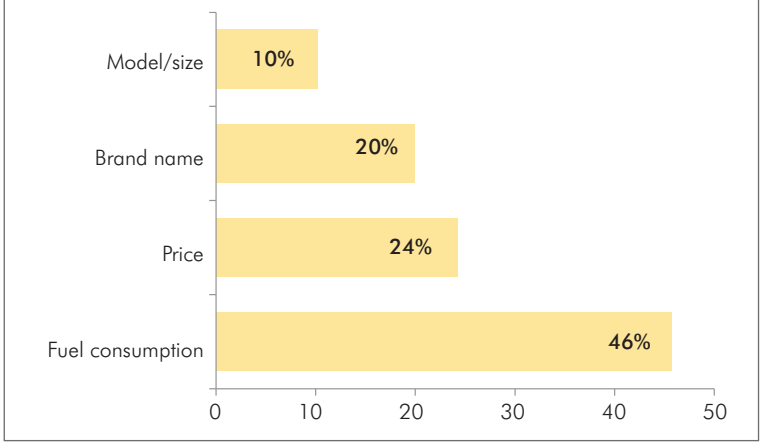
12. Percentage of water cost of the family income

At the regional level, water cost for 54% of the people was below 3% of the family income. It was 4-5% for 31%, between 6-10% for 11%, and above 10% for 4% of the respondents. No sharp differences were noticed between income categories, which clearly showed that people with higher income benefited most of subsidies.

13. Percentage of electricity bill of the family income

Results Results showed that 38% of the respondents spent 4-5% of the family income on electricity bills; 26% of the people paid

FIGURE 10 MAIN CONCERN WHEN YOU BUY A CAR

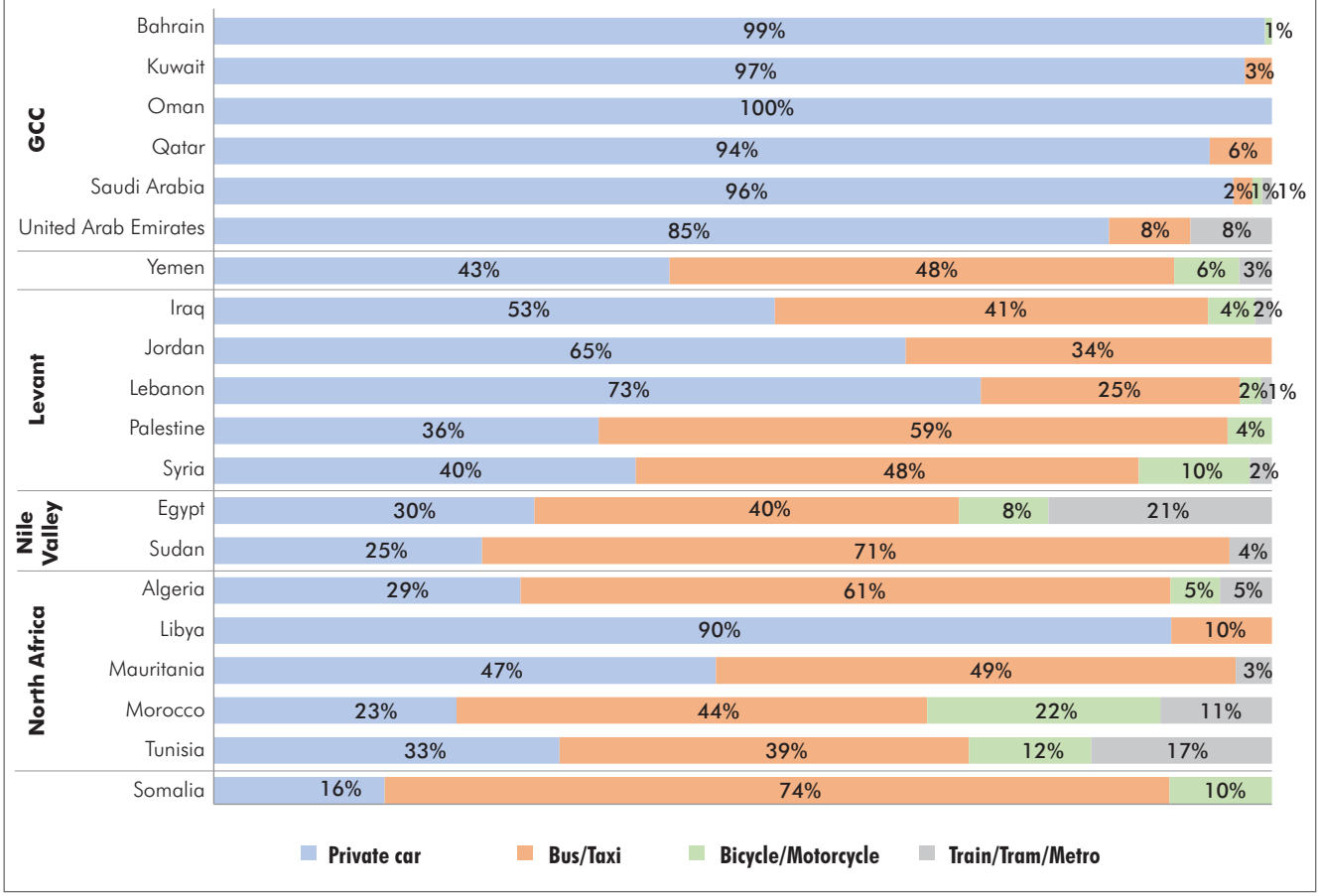


below 3% of family income for electricity, with another 26% paying between 6-10%. The remaining 4% of the respondents paid over 10% of the family income to cover the electricity bill. Those who paid the lowest percentages compared to family income were residents of Qatar, the UAE, Saudi Arabia, Bahrain and Kuwait (countries with high per capita income and heavy energy subsidies). Those who paid the highest percentages of their income for electricity were in Palestine, Lebanon, Tunisia and Algeria. Same as in water, results indicated that higher income categories within countries benefited most of subsidies.

14. What is your main concern when you buy a car?

Respondents were asked to identify their main concern when they buy a car, choosing from among four factors: brand name, fuel consumption, model/size, and price. Fuel efficiency was the motive for 42% of car buyers, brand name for 37%, while 21% chose price as the main determining factor to buy a car. It should be noted that while some of these factors overlap, some variations were noteworthy. Brand name and model were the main factors in Qatar, Saudi Arabia, Bahrain, Kuwait and the UAE – well above 50% of the total (countries with very cheap fuel prices). Fuel efficiency and price dominated as the main factors in Jordan, Egypt, Morocco, Lebanon, Iraq and Tunisia. The highest percentage of those who choose a car for its fuel efficiency was in Jordan (72%) and the lowest in Saudi Arabia (17%) and Qatar (16%). This shows a direct relationship with fuel prices, which are high in Jordan and very low in Saudi

FIGURE 11 WHICH MEANS OF TRANSPORTATION DO YOU USE MOST?



Arabia and Qatar, and GCC countries in general, in combination with differences in income levels.

15. Which means of transportation do you use most?

Although modes of transport most used by respondents varied according to country and place of residence, some broad results were common. As the regional average, 47% used a private car, 41% bus or taxi, 6% metro or tram, and 6% motorcycle or bicycle. The use of a private car was highest across the GCC countries, followed by Lebanon. Besides social habits, this reflects in many cases the lack of a reliable public transport system. It was remarkable to note that 8% of those who responded from the UAE use the metro, introduced to Dubai in 2009, with networks under construction in Abu Dhabi. The growing popularity of the metro in the UAE shows that people are ready to use public transport when offered in an appropriate manner.

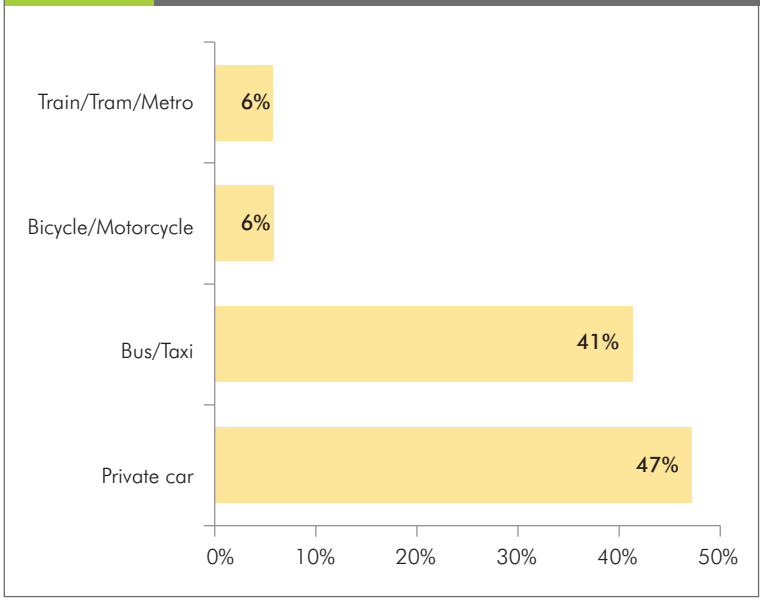
16. Sharing personal car with others

Asked whether people were ready to share a personal car with others to go to work, 84% said yes and 16% said no. The highest percentage of rejection came from GCC countries, topped by Saudi Arabia, likely due, at least in part, to social and cultural reasons. Still in those countries, acceptance of sharing a car with others to go to work was significant, attracting over 50% of respondents in every GCC country.

17. Do environmental labels influence your choice of a hotel?

Although the concept of environmental labels for hotels is new to the region (such as Green Stars in Egypt), some hotel chains promote their own environmental programs. The survey showed that clients might not be indifferent, as 79% of the respondents said that an environmental label will play a role when they choose a hotel.

FIGURE 12 WHICH MEANS OF TRANSPORTATION DO YOU USE MOST?



18. Does good environmental record play a role in your choice of an airline?

73% of the respondents said that good environmental record and program implemented by a certain airline would affect their choice when they travel. The lowest turnouts came from the UAE and Saudi Arabia (50% each) although the national carriers of both countries advertise environmental commitments, and in some cases environmental initiatives as in the case of Emirates Airlines.

FIGURE 13 DO YOU PREFER LOCALLY PRODUCED OR IMPORTED FOOD PRODUCTS?

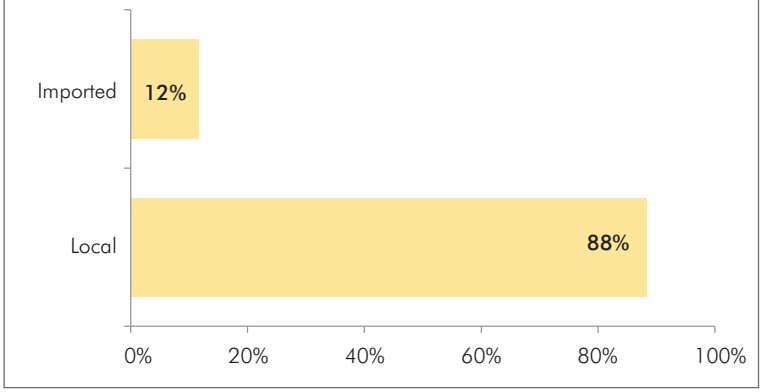
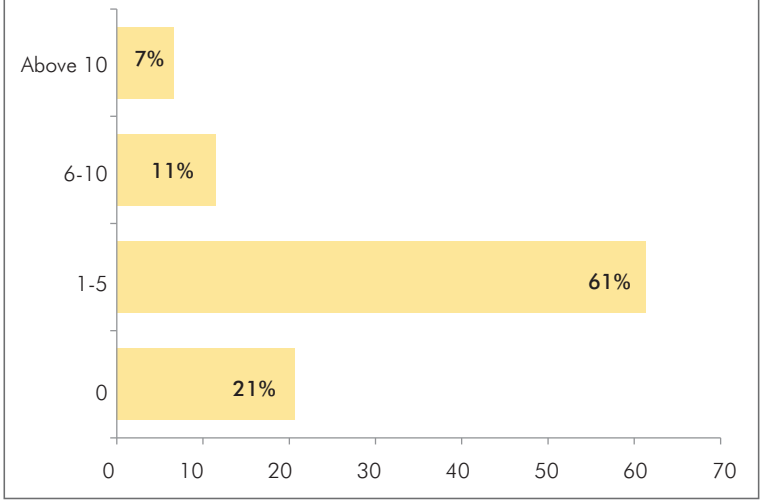


FIGURE 14 HOW MANY TIMES PER MONTH DO YOU BUY FAST FOOD?



C. Food

19. Do you know that Arab countries import half of the basic food they consume?

At the regional level, 89% of the respondents said they were aware that Arab countries import half of the food they consume. There was uniformity in answers among regions and countries.

20. Do you prefer locally produced or imported food products?

An overwhelming majority of 88% said they preferred locally-produced food products, with the score reaching 100% in some countries. It was remarkable that a portion of the respondents from some food-producing countries showed, in few cases, preference for imported food products, probably driven by food safety concerns.

21. How many times per month do you buy fast food?

The majority of respondents (61%) said they buy fast food 1-5 times per month, while 21% said they do not buy fast food at all. 11% buy fast food 6-10 times per month and 7% more than 10 times. Answers to this question revealed unexpected uniformity among countries, rich and poor.

22. What is the percentage of food cost to the total family income?

62% responded that food accounts for over 10% of the family income, with 23% saying it accounts for 6-10%. 14% said it accounts for less than 5% of income. Survey analysis showed that the lower the income,

the higher the percentage spent on food, and vice versa. However, the difference in ranges was not significant.

23. *Are you ready to change your dietary habits to save water and energy resources?*

People were asked whether they were ready to change their dietary habits, by eating less or dropping some types of food that require more energy and water to produce, and shifting to less water-intensive products with similar or higher nutritional value (such as fish and chicken instead of red meat), if this helps to conserve resources and safeguard the environment. 84% of the respondents accepted to shift to other foods, while 16% rejected this. The results were uniform among countries, with a significant higher than average percentage of those rejecting change coming from Saudi Arabia (29%).

24. *Are you ready to change your dietary habits to improve your health conditions?*

Considering that changing dietary habits helps fight many diseases, including diabetes and obesity, participants were asked whether they were ready to change their dietary habits if this leads to improvement in their health condition. A resounding majority of 99% answered yes. Positive responses reached 100% in most countries.

FIGURE 15 ARE YOU READY TO CHANGE YOUR DIETARY HABITS TO SAVE WATER AND ENERGY RESOURCES?

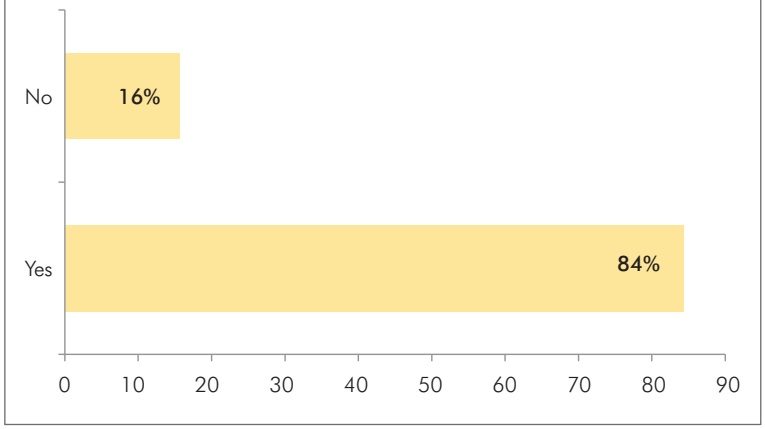


FIGURE 16 ARE YOU READY TO CHANGE YOUR DIETARY HABITS TO IMPROVE YOUR HEALTH CONDITIONS?

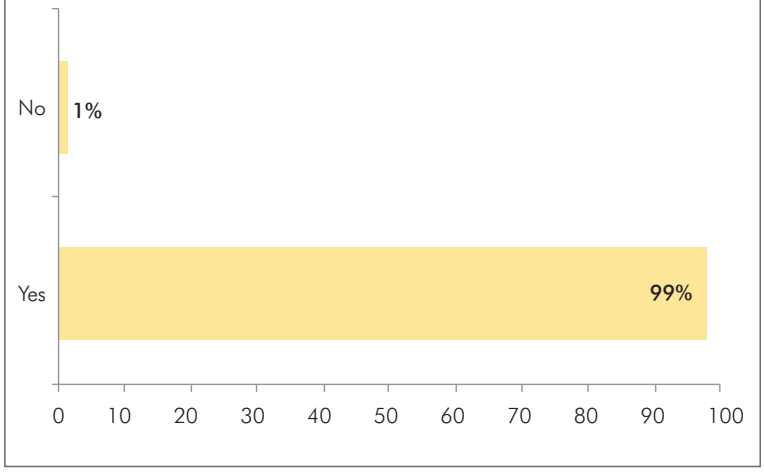


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TABLE **REGIONAL AND SUBREGIONAL SURVEY RESULTS (%)**

		GCC	LEVANT	Nile Valley	North Africa	African Horn	Regional Average
1- How did the environment change in 10 years?	Has not changed	14	9	10	14	16	**12**
	Improved	28	9	12	19	29	**16**
	Worsened	59	82	78	66	55	**72**
2- Is the government doing enough to solve environmental problems?	No	71	91	83	77	71	**82**
	Yes	29	9	17	23	29	**18**
3- Most important environmental problems	Air Quality	9	10	10	7	7	**9**
	Food Safety	5	11	13	7	16	**9**
	Fresh Water Availability	9	8	3	3	5	**5**
	Fresh Water Quality	4	8	9	6	10	**7**
	Industrial Pollution	10	6	9	13	0	**10**
	Inefficiency in Water and Energy Use	10	13	11	11	11	**12**
	Marine Pollution	9	2	2	6	16	**5**
	Noise Pollution	4	4	7	5	1	**5**
	Quality of Sanitary and Wastewater Disposal System	8	9	10	10	11	**9**
	Solid Waste	13	15	12	18	16	**16**
	Traffic Congestion and Transport Systems	17	13	14	14	5	**14**
4- Threat of climate change	No	12	15	11	11	26	**12**
	Yes	88	85	89	89	74	**88**
5- Do you know that the Arab region is the poorest in the world in natural water resources?	No	19	23	26	35	45	**28**
	Yes	81	77	74	65	55	**72**
6- Do you know that individual consumption of water and energy in some Arab countries is among the highest in the world?	No	19	21	16	30	21	**23**
	Yes	81	79	84	70	79	**77**
7- What is the main reason behind high water and energy consumption?	Climate conditions	7	4	4	6	13	**5**
	Lack of public awareness	34	47	38	52	32	**46**
	Subsidies of water and energy tariffs	9	5	4	7	0	**6**
	All of the above reasons	51	44	54	36	55	**43**
8- Do you use water-saving devices at home?	No	52	49	60	57	61	**55**
	Yes	48	51	40	43	39	**45**
9- Would you accept to pay more for water, electricity and fuel if the increase is compensated by direct social benefits?	No	26	18	25	25	16	**23**
	Yes	74	82	75	75	84	**77**
10- What is your main concern when you buy an electrical appliance?	Brand name	46	28	47	41	11	**37**
	Efficiency in energy consumption	24	50	36	40	64	**42**
	Price	30	22	17	19	25	**21**

		GCC	LEVANT	Nile Valley	North Africa	African Horn	Regional Average
11- Do you use energy-saving lamps?	No	27	8	8	18	53	**15**
	Yes	73	92	92	82	47	**85**
12- Percentage of water cost of the family income	Less than 3%	66	55	55	50	29	**54**
	4-5%	26	30	28	34	29	**31**
	6-10%	8	11	14	11	29	**11**
	Above 10%	1	4	3	5	13	**4**
13- Percentage of electricity bill of the family income	Less than 3%	43	23	26	22	24	**26**
	4-5%	37	36	35	41	24	**38**
	6-10%	15	27	30	26	39	**26**
	Above 10%	5	14	9	11	13	**11**
14- What is your main concern when you buy a car?	Brand name	23	13	19	24	8	**20**
	Fuel consumption	17	60	51	39	49	**46**
	Model/size	24	7	6	9	11	**10**
	Price	19	20	24	28	32	**24**
15- Which means of transportation do you use most?	Bicycle/ Motorcycle	1	4	7	8	8	**6**
	Bus/ Taxi	2	40	47	52	63	**41**
	Private car	97	55	29	32	29	**47**
	Train/ Tram/ Metro	1	1	18	8	0	**6**
16- Sharing personal car with others	No	32	11	13	15	32	**16**
	Yes	68	89	87	85	68	**84**
17- Do environmental labels influence your choice of a hotel?	No	34	21	20	17	37	**21**
	Yes	66	79	80	83	63	**79**
18- Does good environmental record play a role in your choice of an airline?	No	42	26	25	24	24	**27**
	Yes	58	74	75	76	76	**73**
19- Do you know that Arab countries import half of the basic food they consume?	No	17	13	7	8	21	**11**
	Yes	83	87	93	92	79	**89**
20- Do you prefer locally produced or imported food products?	Imported	14	12	16	8	29	**12**
	Local	86	88	84	92	71	**88**
21- How many times per month do you buy fast food?	0%	14	19	28	21	18	**21**
	1-5	61	64	59	60	66	**61**
	6-10	15	11	8	12	13	**11**
	Above 10	9	5	5	8	3	**7**
22- What is the percentage of food cost to the total family income?	Less than 3%	4	2	3	5	5	**3**
	4-5%	17	10	6	12	13	**11**
	6-10%	32	21	15	24	39	**23**
	Above 10%	48	67	76	59	42	**62**
23- Are you ready to change your dietary habits to save water and energy resources?	No	19	16	15	15	26	**16**
	Yes	81	85	85	85	74	**84**
24- Are you ready to change your dietary habits to improve your health conditions?	No	1	1	1	2	0	**1**
	Yes	99	99	99	98	100	**99**