



LIFE Environmental Governance & Information



**Integrated information and awareness campaign
for the reduction of plastic bags in the marine environment**
**Ολοκληρωμένη εκστρατεία ενημέρωσης & ευαισθητοποίησης
για τη μείωση της πλαστικής σακούλας στο θαλάσσιο περιβάλλον**
LIFE14 GIE GR/001127

Action: C.1 Monitoring of the project impact on the target audience

Deliverable: 10.3.1.2

**A Report on the quantitative surveys carried so far during A-core & B-core
Actions. Initial results & conclusions.**



January 2017

Integrated information and awareness campaign for the reduction of plastic bags in the marine environment

The **LIFE DEBAG** project "Integrated information and awareness campaign for the reduction of plastic bags in the marine environment" (LIFE14 GIE GR/001127) is co-funded by the EU Environmental Funding Programme **LIFE Environmental Governance and Information**.

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LIFE DEBAG's Participating Beneficiaries:

- **University of Patras**
- **Oikologiki Etaireia Anakyklosis**
- **MEDITERRANEAN SOS Network**
- **TERRA NOVA Environmental Engineering Consultancy Ltd.**
- **Research University Institute of Sustainable Development and Human Resources, Panteion University**

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This report presents the initial findings from the implementation of Action C.1 'Monitoring of Project Impact on the Target Audienc'e of LIFE DEBAG project.

1. Introduction

Action C.1 seeks to continuously monitor the impact of the B-core actions on the target audience, namely B.3: Information campaign in press and electronic media and social networks, B.4: Information and education campaign in Syros and B.5: Organization and operation of a stakeholders' consultation Forums. As it has already been proposed during the implementation of the monitoring Action C.1 qualitative and quantitative methods have been combined in order to generate both a statistically reliable measure of the magnitude of the impact and a greater depth of understanding of how and why the project is or not effective and how it might be adapted. Quantitative methods that have been applied during Action C.1 include the monitoring of **the number of people** reached by the implementation of Actions B.3 (Information campaign in press and electronic media and social networks), B.4 (Information and education campaign in Syros) and B.5 (Organization and operation of a stakeholder's consultation Forum). So far, results from surveys conducted during B-core Actions have to be analyzed further and then compared against the results obtained from surveys during A-core Actions, an activity which has not yet been finalized. It needs to be mentioned that the final deliverable for C.1 Action is not due in until March 2018. However, numbers that been obtained from the communication and information campaign so far indicate that targets set are indeed achievable and that more effort needs to be placed in activities where more active participation of associated stakeholders is of essence. At this point only some conclusions regarding the already existing views of a sample of the wider public on the plastic bag issue have been drawn. In order to assess how environmental preferences of associated stakeholders and the target audience have been shaped during the LIFE DEBAG project more analysis of results obtained during surveys conducted for Actions A.1, A.3 and B.3, B.4, B.5 are needed. Additionally, surveys planned to take place during the second Plastic Bag Free Week with hotel and rental facility owners but also a nation-wide campaign scheduled for 11-12/2017 are still pending, whose results will be vital in order to securely assess how the information campaign has affected the target audience.

2. Results and Discussion

C.1 Monitoring of the project impact on the target audience:

2.1 Time Period the Action took place.

Foreseen start date: 1-01-16

Actual start date: 1-01-16

Foreseen end date: 31-03-18

Actual (or anticipated) end date: 31-03-16

2.2 Progress of planned Action & Indicators

Action C.1 seeks to continuously monitor the impact of the B-core actions on the target audience, namely B.3: Information campaign in press and electronic media and social networks, B.4: Information and education campaign in Syros and B.5: Organization and operation of a stakeholders' consultation Forums. As it has already been proposed during the implementation of the monitoring Action C.1 qualitative and quantitative methods have been combined in order to generate both a statistically reliable measure of the magnitude of the impact and a greater depth of understanding of how and why the project is or not effective and how it might be adapted. Quantitative methods that have been applied during Action C.1 include the monitoring of **the number of people** reached by the implementation of Actions B.3 (Information campaign in press and electronic media and social networks), B.4 (Information and education campaign in Syros) and B.5 (Organization and operation of a stakeholders consultation Forum).

The results from surveys conducted during Actions B3, B.4 and B.5 will be compared to those obtained from the survey conducted in Actions A1 and A3 and will be presented in Action in the deliverable produced for Action C.1, a report due in March 2018. The difference between the outcomes of these surveys and those from the survey conducted during Actions A.1 and A.3 will reveal the environmental preferences relevant to the problem of plastic bags. These differences could be considered as the effect, the influence of the information campaign. At this present time, since not all of the surveys in question have been finalized together with their results, a comparison at this point is not possible. At this stage of the project it is only safe to refer to actual numbers that have been recorded for all of the above Actions so as to provide an initial impression on the type and number of people reached by the implementation of the afore mentioned Actions.

The design of the questionnaire based on the Choice Experiment Method has taken place and the finalization of the pilot Implementation for the island of Syros was terminated by April 2016. The survey

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Implementation (1st set of interview survey) for the general public and SME's of Syros has taken place between May 2016 and June 2016. The survey Implementation (2nd set of interview survey) for hotel owners, room rental facility owners and stakeholders of Syros is foreseen for May 2017.

The Implementation of the 1st phase web based survey at national level in order to estimate the general public awareness, so as to be used as the initial values to be compared to those that will arise from the monitoring activities in Action C1, has taken place and is expected to be terminated by October 2017.

The Implementation of the questionnaire survey which were filled in by the participants of the three stakeholder consultation fora that have taken place on April 15th 2016, July 7th 2016 and September 16th 2016 accordingly.

The Implementation of the web based campaign at national level after the implementation of most information and education campaigns is foreseen for November / December 2017.

At this stage of the project it is only safe to refer to actual numbers that have been recorded for all of the above Actions (A.1 & A.3 and B.3, B.4 & B.5) so as to provide an initial impression on the type and number of people reached by the implementation of the afore mentioned Actions. Therefore, no comparison will be attempted here in order to draw any conclusions with regard to people's environmental preferences.

The results of the web-based research conducted during Action A.1 involved a sample of 267 persons for the period 19-27 / 01/2016. Based on the answers obtained and after an initial analysis was carried out for the sample of 267 people the following conclusions were drawn as already mentioned in the report delivered during Action A.1:

- Almost all respondents are well aware that plastic bags have a negative impact on the environment, particularly on marine ecosystems, and over half of them are aware of the EU's policy for drastic reduction of plastic bags.
- More than half of the sample of respondents is well aware of that the cost of plastic bags is included in price of purchased products. Another nearly 15% of the sample said that they have heard something on the subject.
- More than 97% of the respondents (almost all) believe that the drastic reduction of plastic bags can come either by using their own alternative means or by purchasing an alternative mean of carrying their products from the stores where they make their purchases. Less than 3% of the respondents said that the current situation should not be changed. Despite the high environmental awareness and knowledge of the sample questioned, it is safe to claim, that 'the consumers in Greece are quite mature and ready to accept major changes in the direction of the active reduction of plastic bags.
- More than 91% of the respondents consider that the imposition of a € 0.05 fee on every plastic bag will either lead to a reduction in their use or that it encourage them to use alternative means of transporting goods. Fewer than one in ten said they would continue to use the same number of plastic bags. Despite the high environmental awareness of the sample questioned, it is safe to argue that "the imposition of a fee per plastic bag can be instrumental in changing consumer behavior in Greece, in the direction of the active reduction of plastic bags."
- More than 37% of the respondents said that a potential measure on the reduction/prohibition of plastic bag use would not affect them at all, while a 42% of respondents said it would affect them severely, and only a portion of about 22% said it would affect them considerably. Based on these figures, it is safe to say that "restrictions / elimination of the use of plastic bags seems like a "difficult"-to-accept measure,

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in relation to influencing consumer behavior, but the conditions for it to be positively seen by consumers are worth investigating ".

In order to quantitatively assess the type and number of people which have been reached by implemented activities of Actions B.3, B.4, B.5 and A.1, A.3 we present the following information collected during these activities so far. From the following information we can get an impression of the amount of people that have been informed so far about the project, see to what degree several goals have been reached or to what degree they have been accomplished and at the same time see where more emphasis should be given during the continuation of these Actions so that the expected results can be successfully obtained and the targeted stakeholder groups have indeed been impacted by the information campaign, thus increasing the level of their participation and involvement in associated activities foreseen until the end of the project and most importantly outside and beyond the scope of LIFE DEBAG.

With regards to Door to door campaign conducted in Syros households and SMEs during Action B.4 in June 2016 more than **4916** households and shops were informed and more than **4930** reusable bags have been distributed.

According to the answers obtained during the conduct of the Door to Door survey in Syros households, the following numbers and conclusions can be drawn:

- Regarding the question how well informed the sample of respondents is on the problems caused to the marine environment, human health and tourism by the current use of plastic bags, the following numbers were deducted.

	Possible answer	% of sample of respondents	% of sample of respondents based on the interviewer' perception
1	I am not aware of the problems at all	7.33%	12.89%
2	I am a little aware of the problems	22.28%	43.60%
3	I am considerably aware of the problems	35.25%	23.53%
4	I am well informed of the problems	25.84%	13.70%
5	I am very well informed of the problems	9.30%	6.28%

From the above we can clearly notice a level of difference between the type of level of information the respondents claim to have on the issue compared to what knowledge the interviewer thinks they actually have. If we consider the perception of the interviewer as a more reliable source of information on the answers the respondents gave, then we could safely say that a big portion of respondents is not

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adequately informed on the problems caused by the use of plastic bags (43.6%), while only a small portion of the respondents sample claimed they are very well informed on the issue. Thus, we could argue that the information campaign has a lot more distance to cover in terms of the level and quality of information disseminated through the communication channels and activities of the LIFE DEBAG project.

- Regarding the question ‘what alternative means of carrying purchased goods would respondents choose if single use plastic bags were totally banned from retailers shops’ the following answers were obtained:

	Preferred Alternative means	Daily groceries	Super Market	Open air market	Other type markets
1	Carrying Net of multiple uses	5.72%	1.82%	2.75%	1.93%
2	Multiple use cotton bag	72.11%	68.05%	60.97%	66,49%
3	Propylene multi use bag	7.22%	12.55%	9.12%	8,15%
4	Multi use paper bag	7.8%	5.56%	5.49%	11,44%
5	Biodegradable multi use bag	3.24%	5.20%	3.72%	3,72%
6	Shopping trolley	1.77%	4.77%	13.09%	1,70%
7	Other	2.13%	2.06%	4.86%	6,58%

From the above obtained answers it becomes evident that the sample of respondents showed a clear preference to the multi-use cotton bags as an alternative means of carrying purchased goods in all types of retailer’s shops while the least favorite was the multi-use carrying net followed by the biodegradable bag. This might be due to the level of knowledge consumers have, for example, on biodegradable bags while the highly recorded preferences on cotton bags show either that the information available on their use has reached more consumers and/or the LIFE DEBAG project as an information tool has indeed influenced the ways the information on the plastic bag issue has become more readily available.

- Regarding the question what minimal order of cost imposed on the plastic bag would make respondents not buy a plastic bag and seek an alternative means for carrying their purchased goods, the following numbers were obtained.

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	Plastic bag cost	Respondents preference on minimal cost
1	0.05€ per pl.bag	70.30%
2	0.10€ per pl.bag	13.59%
3	0.15€ per pl.bag	4.33%
4	0.20€ per pl.bag	4.42%
5	0.25€ per pl.bag	1.02%
6	0.30€ per pl.bag	1.29%
7	0.40€ per pl.bag	5.04%

From the above obtained answers it becomes evident that an imposed cost on plastic bags, which so far were freely distributed, clearly affects consumers' choice and would make them seek an alternative means to carry their purchased goods. 70 percent of the respondents sample answered that even the lowest cost imposed on the plastic bag would stop them from purchasing a plastic bag for their groceries. This information may have a manifold meaning. Respondents are unwilling to pay for a plastic bag when doing their shopping. However, this information does not reveal whether consumers would be willing to pay a minimum cost on the plastic bag if they were aware that a portion of this cost was going towards, for example, a cleaner marine environment. This is indicative of the fact that consumers' choice is affected by the information available but also by what are the available options when making a choice.

According to the answers obtained during the conduct of the Door to Door survey in Syros Small Medium Enterprises (SMEs), the following numbers and conclusions can be drawn:

- Regarding the question how well informed the sample of respondents is on the problems caused to the marine environment, human health and tourism by the current use of plastic bags, the following numbers were deducted.

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	Possible answer	% of sample of respondents	% of sample of respondents based on the interviewer' perception
1	I am not aware of the problems at all	5,56%	9,39%
2	I am a little aware of the problems	9,58%	31,03%
3	I am considerably aware of the problems	32,76%	23,95%
4	I am well informed of the problems	35,44%	22,61%
5	I am very well informed of the problems	16,67%	13,03%

From the above, taking as more reliable answers the ones provided by the interviewer on what the respondents actually believe, we could notice that over 30% of the sample of shop keepers had a low level of knowledge on the problems caused by the use of plastic bags. This could well mean that more effort could be made to provide shop and business owners with more information on the detrimental effects of plastic bag use to human health and environment.

- Regarding the question 'what alternative means of carrying purchased goods would respondents choose if single use plastic bags were totally banned from retailers shops' the following answers were obtained:

	Preferred Alternative means	Daily groceries	Super Market	Open air market	Other type markets
1	Carrying Net of multiple uses	4,60%	0,96%	3,45%	2,68%
2	Multiple use cotton bag	60,73%	54,79%	51,72%	57,85%
3	Propylene multi use bag	10,54%	18,20%	14,94%	12,26%
4	Multi use paper bag	15,71%	11,11%	10,54%	16,67%
5	Biodegradeable multi use bag	4,98%	5,94%	5,17%	5,36%
6	Shopping trolley	1,72%	7,47%	10,15%	1,92%
7	Other	1,72%	1,53%	4,02%	3,26%

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From the above obtained answers again it becomes evident that the sample of respondents showed a clear preference to the multi-use cotton bags an alternative means of carrying purchased goods in all types of retailer's shops while the least favorite was the multi-use carrying net followed by the biodegradable bag. This might be due to the level of knowledge consumers have, for example, on biodegradable bags while the highly recorded preferences on cotton bags show either that the information available on their use has reached more consumers and/or the LIFE DEBAG project as an information tool has indeed influenced the ways the information on the plastic bag issue has become more readily available.

- Regarding the question what minimal order of cost imposed on the plastic bag would make respondents not buy a plastic bag and seek an alternative means for carrying their purchased goods, the following numbers were obtained.

	Plastic bag cost	Respondents preference on minimal cost
1	0.05€ per pl.bag	66,28%
2	0.10€ per pl.bag	14,56%
3	0.15€ per pl.bag	2,87%
4	0.20€ per pl.bag	5,36%
5	0.25€ per pl.bag	0,77%
6	0.30€ per pl.bag	2,49%
7	0.40€ per pl.bag	7,66%

From the above obtained answers it becomes evident that any imposed cost on plastic bags, which to this day are freely distributed, clearly affects consumers' choice. Here it becomes clear that shop owners would react the same way as their customers to an imposed cost on plastic bags. 66 percent of the respondents sample answered that even the lowest cost (0.05 cents) imposed on the plastic bag would stop their customers from purchasing a plastic bag for their purchased goods. This information may have a manifold meaning. Respondents are unwilling to pay for a plastic bag when doing their shopping. However, this information does not reveal whether consumers would be willing to pay a minimum cost on the plastic bag if they were aware that a portion of this cost was going towards, for example, a cleaner marine environment. This is indicative of the fact that consumers' choice is affected by the information available but also by what are the available options when making a choice.

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So far 12,000 leaflets have been distributed to the general public while 8,200 cotton re-usable bags have been distributed to Syros local inhabitants and visitors during the first Plastic Bag free week in Syros in June 2016. During the same week, 600 stickers were distributed to interested SMEs.

More than 40 articles have been web published to date and have also been republished in other forms of media and communication, which is difficult to measure. Three (3) electronic e-newsletters have been compiled and sent to the project's emailing list, which contains over 300 emails of stakeholders and media. The content of the e-newsletters related to the first Plastic Bag Free week and the 3 stakeholder forums that have taken place this far.

The official Facebook page of the project has already achieved the target of 1000 likes by 147 more likes (1,147 likes in total). Facebook statistics are presented in more detail further along in the present report, in the description of action B.3.

One Press conference was held in Syros on May 28 2016, which was broadcasted on the news programs of various local TV stations. Four interviews (4) in total regarding the project's aims and activities were given to nation-wide TV media references to the project were made almost daily on the broadcasts of local radio stations.

So far, 2,723 views on the project's YOUTUBE channel have been recorded while the 3 videos produced regarding aims and activities of the project generated 1,000 views on YOUTUBE.

As far as the project's official web page is concerned 7,632 total visits have been recorded while 5,342 unique people have visited the project's site. In addition so far, 63 tweets have been recorded on the project's web page.

Taking into account all of the above numbers it is safe to argue that as far as the communication and information campaign on electronic type media and similar outlets is concerned, targets seem to be obtainable. However, more effort needs to be exerted in terms of the degree at which associated stakeholders need to be engaged in project activities. The fact that up until now no voluntary agreement by shop retailers has been obtained is indicative of where the emphasis should be placed during the next few months while the Actions are continuing.

2.3. Comparison with planned output

More analysis and reference to type and numbers of people reached by implementing the afore-mentioned Actions will be provided prior to the finalisation of the final report of the project when more results by surveys regarding B-core actions would have been obtained.

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2.4. Problems & delays encountered (changes occurred and how they have affected the action)

Taking into consideration the information-based character of the project and the need to engage associated stakeholders as much as possible in project activities it is of outmost importance that more effort is focussed in enhancing the communication with the latter so that a more clear understanding can be obtained regarding the environmental preferences of the target audience.

2.5. Deliverables

A report will be produced when all surveys will conclude and results from these surveys obtained so that a comparison could be attempted between the results of surveys conducted during B-core Actions and the survey conducted During A-core (preparatory) Actions. The report is not due in until March 2018.

2.6. Complementary actions outside LIFE & Continuing the action after the end of the project

The findings of the surveys research may be used as an input for designing environmental awareness campaign elsewhere and for other environmental objectives. Thus, depending on the outcome of the surveys at a later stage of the project we should be able to conclude on whether similar to C.1 actions can be sought either outside LIFE or after the end of the LIFE-DEBAG project.