

WHY DO WASTE MANAGEMENT ORGANIZATIONS ALWAYS DEFEND THEMSELVES WHEN PLANNING A PROJECT? A GUIDE TO OVERCOME OPPOSITION AND RAISE PUBLIC INVOLVEMENT - A SMALL ISLAND CASE STUDY

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ABSTRACT

PURPOSE: A Solid Waste Management Project generates Social Opposition. As a result, waste management organizations always defend themselves and the plan may end into a full disaster as it will either take years and years to finish or sometimes will even be discarded by the community and the planners. The scope of this paper is to provide a practical guide that will ensure lower opposition levels.

METHOD: It is fully supported that regardless the case every attempt should begin with a detailed Social Assessment. It is usually recommended former to the SA to conduct at least one detailed visit in the area of interest along with an extensive survey of bibliography and records, that will give information including feature analysis (e.g. social characteristics, local economy levels, geological and geographical data) and severe opposition incidents regarding SWMP in the past. The SA study should be followed by a step by step process, so a presentation of this procedure is thoroughly explained. Building your Credibility and analyzing the mitigation of every negative impact is crucial during this stage.

RESULTS: The proposed process is implemented in the case of the small Greek island Agkistri. Processing of data is still not complete, yet we have got a lot o good signs implying that the procedure could be really useful.

CONCLUSION: In order to lower publics' opposition to a new solid waste facility plan, it is highly recommended to apply the proposed step by step process. This collaborative method may solve arguments or at least lead to a different endpoint beneficial to all parts.

1. INTRODUCTION

A Solid Waste Management Project generates Social Opposition. This is by far the most expected reaction of public all over the world. It seems that waste is always an intractable political problem so waste management projects are the ultimate LULU (Locally Unwanted Land Use), rejected by communities wherever they were put forward.

As a result, a new project will either take years and years to finish or sometimes will be discarded by the community and planners.

Typical example of severe public opposition to new SWMP in Greece are the landfill siting and construction attempt in the area of PAPANIKOLOU of Achaean region. In this case, the first step was a feasibility study by local public authorities in order to locate the most suitable site. That happened back in 1996. Unfortunately, the conviction of the local community that change will lead to deterioration in the quality of life at a social and economic level led to full-scale reactions. Until the end of summer of 2016 after the change of 6 or 7 different central governments and at least 4 mayors:

- The construction site was still incomplete, so full exclusion of European funding is possible.
- The problem with solid waste is still present and of course stronger.
- A major dispute has arisen between the contractor, environmental authorities, the local government and at least two main social groups in the community.



<https://patratora.gr/archives/92220> . Accessed 18 April 2018

Without doubt, the most important reasons for such an ending, are: the complexity of the law system, the political cost perception by the governments and break of bonds between local governments and the community due to mutual lack of trust¹.

The aim of this study is to describe a two-stage process which might be helpful or in some cases, even extremely useful in order to attain the desired result, meaning a completed SWMP highly approved by the people of the local community.

Those two stages are described as social Assessment and Ways to overcome public opposition.

2. SOCIAL ASSESSMENT

2.1 Preface

Planning effective and sustainable investments in solid waste management systems requires an understanding of the needs and preferences of a wide range of stakeholders in the service delivery, costs, and corresponding environmental and social impacts.

Because solid waste management is highly visible and affects residents' perception of government functionality, government and its political representatives are also stakeholders.

To ensure public support, the planners of any investment will need to involve all important stakeholders.

¹ Lantavou, 2016

As new SWM systems are being designed or existing ones modified, stakeholders will need to be provided with feedback on issues related to the provision and use of solid waste services.

No less important is feedback concerning financial arrangements, like fee setting and fee collection.

Since social fabric has a critical impact on the design and operation of SWM systems, and in turn is affected by them, social considerations are crucial to their design and implementation.

Social assessment (SA) is an important process through which these considerations can be incorporated in both the design and implementation of SWM systems.

SA is an instrument that enables an agency to examine the sustainability of the project and to incorporate measures to enhance the project's sustainability.

SA involves examining the area's socio-cultural, institutional, historical and political context as well as stakeholders' views and priorities.

Community participation in SWM refers to a range of activities that members of this community can be involved in, in order to support a solid waste management project. Examples of some of the most common roles that communities could undertake are:

- Supporting and participating in projects in order to improve solid waste management.
- Providing input to planning or decision-making framework.
- Providing public education for raising awareness about issues and problems of solid waste management, including health education and environmental health.
- Sponsoring or participating in special campaigns and competitions to raise the profile of solid waste management.

An integral part of an efficient SA should be a detailed questionnaire, preferably at the beginning of the procedure, directed at least to the leaders of the community. If that is not possible, then a questionnaire should be passed to the suitable stakeholders in a following stage.

2.2 The sets of values

An SA should aim to assess mainly five sets of values:

1. Social Diversity and Gender: SA examines the social organization of the population. For example, we need to know things like *ethnicity, clan, gender, locality, class, and language*. Gender analysis focuses on understanding the differences in roles, activities, needs, and opportunities available to people according to their gender.

2. Existing Institutions, Rules, and Behavior: An SA examines the groups' characteristics and the relationships of those groups with the existing private and public institutions in the area of interest.

3. Identify Important Stakeholders and Key Social Issues: Stakeholders include the various organizations, groups and individuals who have an interest or a stake in the project. Key stakeholders include but are not limited to: residents living near the project, waste pickers, environmental groups, concerned citizens, and public officials. Other stakeholders include: waste management professionals, local developers, and manufacturers. Findings of a Stakeholder Analysis can provide among others essential information about: who will be affected by the project (positively or negatively) who could influence the project (again, positively or negatively); which individuals, groups, or agencies need to be involved in the project and how. Issues of social concern are usually connected with the interests of each stakeholder group. Once the stakeholders are identified, the next step is to ask: "how are they likely to be affected, both directly and indirectly".

4. Participation: An SA examines opportunities and conditions for the participation of stakeholders in the development process.

5. Social Risk: An SA discovers the potential social risks associated with a project and explores ways to address them in order to achieve the project's development objectives. The most obvious risks are social tensions, political instability, local economy distress, safety and health risks.

2.3 The ideal SA

- Facilitates the process through which the Planner better understands social organization and cultural systems, as well as institutional, historical, and political contexts in order to ensure the quality of investment design and success during implementation.
- Provides means to enhance equality, strengthen social inclusion, promote transparent governance and empower the poor and weak in project design and implementation.
- Constitutes a mechanism to identify the opportunities, constraints, impacts and social risks associated with policy and project design.
- Provides a framework for dialogue on development priorities among social groups, civil society, different levels of government and other stakeholders.
- Uses an approach to identify and mitigate the potential social risks, including adverse social impacts.

The quality of a social assessment depends on a range of factors, but always the most important thing is the availability of resources and time to carry out the necessary social surveys and analyses. Of course, the ultimate test of a good SA is its impact on project design and implementation².

3. WAYS TO OVERCOME PUBLIC OPPOSITION

3.1 Succeed an effective Public Involvement

The first step in designing a public involvement program is to stop and think: Who is the public? The public is not a single entity. Many interests and groups make up the various segments of the public. Some of these interests or groups are well organized. People participate in issues in response to some perceived interest and stay organized as long as that interest continues to be affected. For example, if a neighborhood feels threatened because a potential site for a solid waste facility is in that neighborhood, neighbors will stay organized as long as that site is under consideration (or until the sense of threat is removed in some other way). Once formed, however, some groups continue to stay organized and produce an influence on other issues.

Planning for public involvement at the beginning of the process may forestall costly delays, misunderstandings and conflict. Through planning, it is possible to ensure that the appropriate stakeholders will be involved, that they will be involved sufficiently early in the process and that their involvement will improve public acceptance.

Public Involvement is a process that incorporates both getting information out to the public and getting back responses from the public in the form of ideas and decisions. Techniques are divided into three categories: information techniques (getting information *to* the public), listening techniques (getting information *from* the public) and collaborative techniques (involving the public in decision-making). The chosen method must be associated with the stage of the process, the final objectives and the audience (for example, the education level and the local customs are important)³.

² Bernstein, 2004

³ Squires, 2006

3.1.1 Information Techniques

A good campaign will inform the public about the reasons for which a solid waste facility is needed, about the consequences in both cases: acceptance and rejection. People also need to know that they have alternatives to choose between them.

The most successful techniques proposed by this study are:

Briefings:

Briefings consist of a personal visit or even a phone call to inform key officials before an action is taken. This way you provide background information, answer questions or even announce a decision in some cases. Sometimes by this action you may receive valuable information in response to your announcement.

*** *Involvement of Religious Leaders especially at this stage could be a really clever thing to do: Religious leaders play a significant role in persuading people. Of course, this act may have an impact only on religious communities.***

Mailing out Key Documents directly to the right people:

Mailing key documents (like technical reports) directly to leaders of organized groups and interests, including business, environmental, or neighborhood associations is effective.

News Conferences:

A representative of the project will be speaking directly to the public, on radio or Television. News conferences are usually successful for major announcements or for a time when a well-known spokesperson is available.

Newsletters:

Building a waste facility can take years and newsletters can sustain interest throughout the process. Newsletters are more effective to those people who are most interested in the issue.

Newspaper Insert:

This is a good practice in case you want to reach an entire community with the same information.

Paid advertisements

Make presentations to Civic and Technical Groups:

It's an effective way to communicate with people who are influential in the community. Presentations to engineers, planners, or other professional groups involved in solid waste issues, may help you to create a general perception that you are doing a professional work and nothing is left to luck⁴.

At this stage, public should be well informed. The next step is to provide forums by which the public can express feelings, thoughts or concerns back to you.

3.1.2 Listening Techniques

Focus Groups:

Focus groups are small discussion groups that explore people's reactions. Knowing these reactions, you may modify ideas or present them in such a way to avoid extreme responses.

Hotline

A hotline is a widely advertised phone number to provide a centralized source of information. (Gives people a sense that they know whom to call).

⁴ U.S. EPA, 1990

Interviews:

People will always provide much more information in a face to face discussion than they will in a public forum. Interviews often provide information that cannot be obtained any other way.

Public meetings:

Through public meetings, it is possible to hear all the different concerns and opinions and is useful because you put different groups listen to one another. So, everyone gets a chance to be heard. It is crucial to clarify the purpose of the meeting and its format should reflect the audience you expect to participate.

Questionnaires:

A second phase of a questionnaire (the first one must have been done during the initial Social Assessment) is sometimes necessary. This action will provide information about how the general public feels about an issue⁵.

The highest level of public involvement is to give the public a direct role in making decisions. Collaborative techniques are appropriate in order to achieve such a goal.

3.1.3 Collaborative Techniques

Advisory Groups

Advisory groups are useful in providing citizens' perspectives throughout the process. First, groups must be truly representative. Second, defining the limits of the group's authority is essential. Third, working with an advisory group requires a significant commitment of time and staff resources and should be undertaken only if you are able and willing to commit the resources to make it work well.

You may want to establish several advisory groups to get the involvement of different groups some of them may last throughout the whole plan and some will have only a certain purpose to achieve⁶.

3.2 Building Credibility⁷

3.2.1 Anticipate the issues that will emerge

The first step in building credibility is anticipating and analyzing the issues that are likely to arise.

3.2.2 Invite Public participate in works

Invite leaders of interest groups to spend time to participate in works during construction or even operation of facilities.

3.2.3 Risk Communication

Risk Communication is the exchange of information between planners and the general public about the hazards of design, about what can be done but mainly about what is being done to manage the hazard and its consequences. Risk communication does not simply "educate the public", it emphasizes on a two-way information exchange in which risk managers also listen and learn from public concerns. This information exchange is critical for a responsive, participatory process. The primary goal of risk communication is to help active people participate to the decision-making process of a facility but also to increase the credibility of the planners.

⁵ U.S. EPA, 1990

⁶ U.S. EPA, 1990

⁷ U.S. EPA, 1990

3.2.4 Provide Technical Assistance to the Public

Sometimes the only way to get credibility is to provide the necessary funding to bring in outside consultants who will review studies or even works on behalf of citizen groups.

3.2.5 Present Technical Information in Understandable Language

Presenting technical information with a difficult and no accessible language can fuel people's suspicions that presented data are trying to hide important information. Understandable language can increase the number of people who will pay attention to the information and increase the credibility.

3.3 Mitigating Negative Impacts⁸

If a solid waste facility is to be successfully accepted, it is necessary to find immediate and direct means of mitigating the negative impacts. In fact, just as you need to plan for public involvement and credibility of the design, you need also to anticipate and plan to mitigate the negative impacts of a project. Planning for mitigation is a reality.

Here are a few general principles.

3.3.1 The affected people want Equivalent Benefits

The people who experience negative impacts expect the attention of local government and may demand benefits from the project to offset the damage. It is possible to make tradeoffs between impacts and benefits, in order to make sure that places that accept undesirable facilities also receive improvements such as recreation buildings or school improvements. Mitigation activities are more effective when tied directly to the problem. For example, road improvements might reduce transportation risks and are likely to gain more support than an equivalent amount of cash. A group that bears most of the negative impacts might demand greater supervision over the operation and management of the facility.

Do not try to “Pay” for Health or Safety Impacts

Compensatory benefits may work for some negative impacts, but it does not apply to health and safety issues. If citizens are afraid that a facility will emit hazardous compounds into the air, or pose serious health or safety risks, they cannot be compensated with other benefits. People view health and safety in terms of “safe/unsafe.” If they *perceive* a facility is safe, then it is possible to talk about other issues. If they *perceive* a project poses a genuine risk to health or safety, then everything else is non-negotiable. In other words, with health and safety issues, there are thresholds below which the public will not go. Furthermore, any local politician who gets in the position of accepting community benefits in return for accepting health and safety risks is likely to be viewed as selling out the public's health and safety. Unless people are convinced a facility is safe, any offers of compensation will be seen as a morally unacceptable bribe.

3.3.2 Many Mitigation issues are issues about procedure

When people are not sure of the impacts of a project, they get very concerned with the decision-making process:

- Who makes the decisions?
- What opportunities does the public have to influence decisions?
- Who decides whether to close the facility if something hazardous happens?
- How much access to information is provided?

These issues matter.

⁸ U.S. EPA, 1990

Affected citizens often demand to be represented in the decision-making process and have some control over safety issues.

Things that often the public wants or even demands are:

- *Immediate access to facility management*, so they can express concerns and be confident that the people who are really in charge will address their concerns,
- *Representation on the board of the facility*,
- *Power to shut down the facility* if there are any problems (such as air emissions above air quality standards, severe odor problems, leaks into the ground-water table ,
- *Funds for an independent review of technical studies*,
- *Funds for a continuous environmental monitoring system*.

3.3.3 Property Values

A stigma may be developed in places near a solid waste facility. Owners are concerned that any new facility could affect the image of the neighborhood but mainly the property values. The mitigation measures for this concern might include funding a study of how the solid waste facility has affected property values in other areas. One mitigation measure that has been used in some cases is for the proponent to guarantee the property values of homes in a defined area or even to guarantee the purchase of the home.

3.3.4 Traffic

Typical mitigation measures to address these concerns include working with representatives or conducting public meetings to review proposed traffic routes that reduce safety problems or congestion.

3.3.5 Noise

Addressing these concerns may require working with the public to identify alternative routes or may require adjusting the facility's hours of operation. Steps may also be taken to install soundproofing equipment.

3.3.6 Dust

Dust can be generated both during construction and operation of the facility. Steps to reduce dust during construction should be identified prior to any works so that contractors incorporate these steps into their plans. During facility operation, dust reduction can be handled by installing a hotline to the facility manager, so that neighbors can call in with any complaints.

3.3.7 Visual impact

A field trip to an existing modern facility may be helpful. Also, the designer can work with neighbors to discuss alternative ways of reducing visual impact on the neighborhood.

**During this phase have always in mind that the present level of risk is assumed to be zero*

Any change in risk will be perceived as a negative impact because the people assume the present situation is without risk. For example, a solid waste facility may pose fewer risks than the existing situation, but the emotional reality is otherwise. If you wish to change this perception, then people must be told about both the risks involved in the *existing* situation and the risks of the proposed site.

3.4 Talk to supporters first

The best way to avoid a NIMBY fight is to identify, recruit, and mobilize pro-project allies first. If people believe most of their fellow citizens support a development proposal, they are less likely to voice opposition to it.

Those who generally tend to support a new idea and hear their fellow citizens speak out in favor of the project are more likely to reveal their own support. Community groups, leaders of some kind and individuals with no fixed opinion also are more likely to make up their mind in favor of a project if they believe it is generally supported.

Humans are social creatures who tend to follow the crowd and will often adjust their thinking to act and believe in the same way as most of their neighbors.

Of course, the reverse is also true: If citizens think all their neighbors oppose a project, they are more likely to jump on the opposition.

Media supporters can be extremely helpful. Neighborhood David vs. Government Goliath is an easy story to write and sure to engage readers' emotions⁹.

3.5 Pick the low-hanging fruit first

Crucial initial tasks include identifying supporters, recruiting them and then mobilizing them to express their support for the project. Such supporters can be groups like:

- *direct beneficiaries (construction workers, suppliers, site property owners)*
- *Indirect beneficiaries (everyone who would sell goods and services to new workers; local stores)*
- *Potential project users (municipality)*
- *Special interest groups (organizations motivated by beliefs e.g some strongly believe that a thermal process is the worst scenario even from a large landfill)*

Naturally, these parts will vary greatly depending on the type of development proposed.

Once a strong group of supporters is on hand to back them up, leaders will be more willing to do the “right thing”.¹⁰

3.6 Mobilize Supporters

Recruitment of supporters alone is insufficient.

Citizens can communicate their support directly, such as through letters, emails, post cards, phone calls, or meetings with city council members.

Citizens can express their support through the media: through letters, blogs, social media, opinion articles, talk shows, etc. Communicating support should occur later in the process, what is needed early on is the recruitment of supporters, not mobilization.¹¹

3.7 Understand the four causes of opposition

After the recruitment of supporters, it is time to begin outreach to opponents. Minimizing opposition is a matter of fully understanding its root causes, which usually fall into four categories:

Misinformation, Emotional Needs, Conflicts of Values, and Conflicts of Interest.

MISINFORMATION

This is the type of opposition that is the simplest to deal with and overcome, by simply making sure that the actual facts are presented in a clear manner through a public information campaign.

⁹ G.C.A. STRATEGIES, 2010

¹⁰ G.C.A. STRATEGIES, 2010

¹¹ G.C.A. STRATEGIES, 2010

Project sponsors can sometimes depend on extensive one-way communication mechanisms, (i.e. direct mail, newsletters, fact sheets, blast emails, websites). This approach allows full control of the message and enables quick responses to misinformation. Materials should include simple graphics in order to focus on the relevant facts and figures needed in order to make informed decisions. However, just providing correct information in an impersonal way is often not enough to deal with all resistance. Interactive or two-way communications are preferred in this situation.

MEET EMOTIONAL NEEDS

Opposition from community often may have little to do with the actual project itself. Some people who view themselves as community leaders become involved in land use disputes simply to validate their community leadership role. They expect to be consulted. Fortunately, meeting emotional requirements is frequently the least expensive means of reducing NIMBY opposition.

The same principle may apply to proximate neighbors of a proposed facility who want recognition from local government that they are most impacted by the project. They may demand respect. If the number of adjacent households is small, it is advisable for project sponsors to go door-to-door to meet the neighbors face-to-face. At this stage avoid conducting mass meetings. Large public participation events often tend to anger participants. Furthermore, they create a marvelous forum for potential opponents to meet each other and trade arguments.

FOCUS ON MUTUAL PRIORITIES RATHER THAN CONFLICTING VALUES

Opposition based on a conflict of values is typically the most difficult to address. Some people perceive land use debates as battles between good and evil, particularly with regard to environmental values. For them, environmental preservation is an absolute moral goal that cannot be negotiated. It is critical never to discredit opponents' ethical values. Instead, focus on other values held in common and problems that all agree must be solved like unemployment or lack in municipality's services. If project sponsors also hold a moral commitment to protect the ecology, now is the time for them to affirm this shared goal. Moderate citizens may then be able to set aside differing values to work together to find solutions to these common concerns. If some groups calling themselves as ideologues refuse to talk with the "evil" developer, the best approach may be to bring other more moderate stakeholders into the public participation process.

NEGOTIATE CONFLICTS OF INTERESTS

A fourth root cause of opposition is a conflict of interests. Land use projects frequently cause a battle between perceived positive interests and negative interests. Most people will support a project when they believe it creates benefits that will improve their lives, such as new jobs. However, it is important to remember that many people fear losing what they already have, more than they believe in future benefits.

There are two main ways to deal with opposition to a given project: persuasion and negotiations. The usual first choice is to try and persuade the opponent to see things from a particular point of view. Project sponsors

often use rational persuasion, i.e., a logical presentation of the facts and issues in order to convince citizens of the worth of the project.

However, if persuasion cannot convince the opposition to lay down their arms and give up the fight, it may be necessary to move into negotiations. It is crucial to note that making concessions is usually the most costly and least effective way to resolve conflict. Concessions can cost millions and should be avoided when opposition can be resolved in other ways.

Even if negotiations fail to produce a compromise that all parties can live with, engaging in the process alone can promote development goals. So, through negotiations we remove the anonymity between project sponsor and neighbors and make it difficult to demonize the other side. If some of the opposition results from neighbors' feelings that they have not been consulted and respected, then sincere interaction can induce neighbors to offer you mutual respect. Finally, even if both sides do not agree on all parts of a compromise solution, the negotiation process can result in a development proposal that is more responsive to community concerns. The revised plan developed during negotiations meets at least some or many of neighbors' concerns, even if some remain dissatisfied with certain elements of the project.

It is important to go into negotiations with a positive attitude toward potential concessions. There are numerous types of concessions to consider during negotiations:

Compromise: A project can be modified to remove the real or perceived threat to citizens' interests.

Exchanging Concessions: Giving up something of lesser importance to the development's viability in order to gain a concession of greater importance.

Offering benefits: A new element, service, or program that is so attractive to citizens that it offsets the negative impacts of the project.

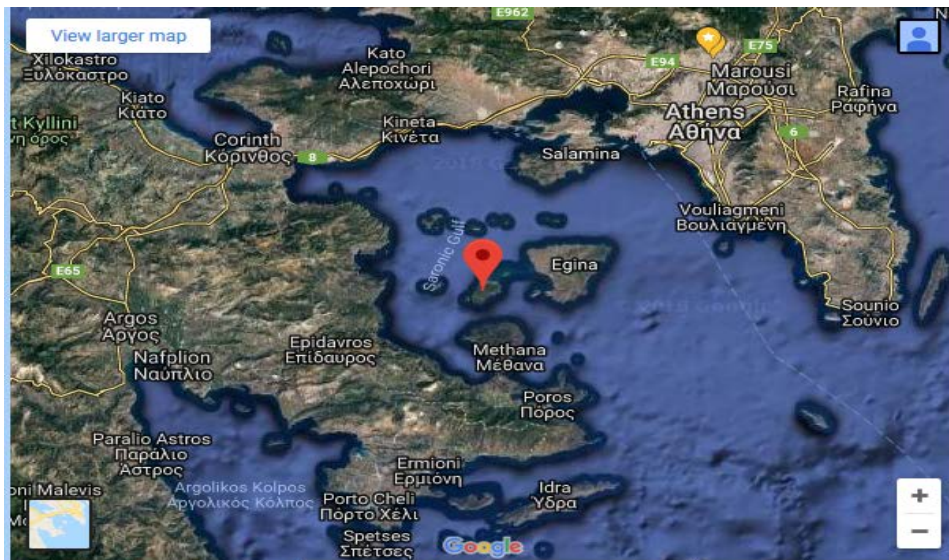
Joint Decision Making: Citizens often protest for equal decision-making powers between them and the project sponsors. Formation of a community advisory committee with representation from several stakeholders may be extremely productive, provided that no stakeholder has veto power. By majority vote of its members, this committee can be empowered to provide counsel on a development scheme to the decision-makers¹².

4. Case Study “AGISTRIS ISLAND”

4.1 Status of the island

Agistri is the smallest island of the Argosaronic Bay, with an area of 14 sq km. It is only 22 nautical miles from Piraeus and 3,5 nautical miles from Aegina island. The island's length is 5,5 km. and its width is 3,5 km.

¹² G.C.A. STRATEGIES, 2010



http://www.agistri-island.gr/en_googlemap.php Accessed 21 April 2018

The population of the island is 1.142 citizens whereas during summer it rises up to 5000 citizens and visitors.

The main products of the island are olive oil and fruits however over the last years the economy is based on tourism.

There are 18 hotels and around 300 rooms to let.

The annual production of solid waste is estimated to 1.452 tons. The composition of waste is 44,3% organics including green matter, 22,2% paper and cardboard, 13,9% plastic, 3,9% metals, 4,3% glass, 11,4% others.

At present, municipality owns 3 garbage trucks and has 3 drivers and 3 workes in its employ but only 2 of them work in full scale the entire year.

4.2 Former and present Solid Waste Management practices and public acceptance

As in most cases in Greek islands, the oldest practice for managing solid waste was uncontrolled dump sites in combination with outdoor burning of desposed waste, throughout the year. Unfortunately, this practice, regardless municipality's big effort for the opposite, still is the preferred way (at least as far it concerns waste dumping) for some people. Restoration of the old dump site, completed in 2017, had the full support of the community, while the improvement of the landscape in the area was outstanding. Most of the solid waste today is led to the central landfill site of Athens in FILI area.



Dumping site before and after restoration¹³

Recycling actions are limited to a) the blue waste bin system use, with a rather medium success and participation, b) moderate levels of recycling for used food oils and electric and electronic materials. (Proceedings of Decision No. 87/2015 of the Municipal Council of Agistri)

4.3 A challenging future through a perspective of higher levels of public approval and participation

Based on our knowledge and experience of the site during the last 5 years, we believe that several things have already been done in terms of low public opposition in new solid waste management attempts. We also believe that a lot more can happen to lead the island to a head post of successful new solid waste management practices all over Greece.

4.3.1 Social Assessment (DONE)

Most of that procedure has already been achieved through our work in the area during the last years, so we are in a position to recognize: social diversity, existing institutions, rules, public behavior as a result of different kind of plans in the past, stakeholders and key social issues.

Due to Social Assessment but also through our cooperation with the municipality we have assessed the most promising future solid waste management schemes. What is really interesting is that most of the needed waste management schemes, according to our survey are those with the highest possibility of being effective and of course accepted by the community.

These schemes are: 1) establishment of a network of bio-waste bins 2) Use of a relatively large area that will be used as a central acceptance spot, for green materials, bulky waste (like furniture), used tyres and electric-electronic type of waste (GREEN SPOT) 3) Management of Construction and Demolition residuals, through a contract with one of the existing systems for treating such materials 4) establishment of a network of waste bins for separate paper and glass collection 5) a composting facility plant.

¹³ EDSNA records, 2017

4.3.2 Ways to overcome public opposition (Still working on it)

Inform the people: Every plan of a new scheme is well known by the large majority of stakeholders. The municipality is very strict on information issues. They truly believe the saying "we all know, we are all involved, we all decide, we are all affected". Using existing means, the local authority promotes every new idea or possibility for a different way to manage waste directly to the public.

Means that have been used: *Public meetings, door to door process.*

Means that can be used in the future: *information through the site of the municipality, fb, twitter, e-mails, door to door process, workshops.*

Educate the people: the municipality has conducted workshops aiming to re-use of recyclable materials with a large stakeholder involvement. These workshops should be enriched and scheduled again soon, with new re-use activities. Interactive events especially in schools are extremely productive and should be planned.



Getting information from the people: The most common way for stakeholders to express their view about municipality actions related to waste management is through public and council meetings but also a rather large questionnaire has been distributed in order to assess publics' opinion for all imminent plans. A hotline is scheduled.

**A promotional campaign apart from its apparent direct impact to inform and mobilize citizens it's a strong tool in the hands of the planner and the municipality because giving a job to unemployed people creates positive feelings towards the scheme.*

Persuade people to be a part of an effort: People must be convinced that it worths to join in a try. In order to succeed something like that on a small island like Agistri, you should connect your effort not only with environmental ethical aspects but mainly with the gain due to a substantial improvement of landscape and thus an upgrade of tourist's satisfaction.

The Credibility of the Municipality: The Credibility of the Municipality reaches relatively high levels, mainly because of the low population number and the almost steady representatives in the municipality head positions. Nevertheless, measures could be applied. The easiest way to increase your credibility is by

knowing everything of the imminent scheme, in decent depth. Information, data, associated risks related to the plan are crucial for the public and should be analyzed and presented in an understandable way.

Mitigate negative impacts: The scheduled plans will produce increased traffic and noise especially during the summer were the most severe wave of tourism is expected. It is crucial to deal not only with these considerations but also with odor and visual impacts.

5. CONCLUSION

It is crucial for all new solid waste designs to carry in public acceptance and participation. The proposed step by step process is a toolkit to help a solid waste management planner, through a highly collaborative method, to achieve public involvement, increase his credibility and mitigate many negative impacts of the new scheme.

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