# Environmental Education for the Unemployed and Households, Malta

## 1. Summary

<table>
<thead>
<tr>
<th>Country/Geographical Area</th>
<th>The Maltese Islands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level implementation</td>
<td>National</td>
</tr>
<tr>
<td>Scale</td>
<td>Roll out</td>
</tr>
<tr>
<td>Waste fraction / Specific Waste Type</td>
<td>Municipal Solid Waste</td>
</tr>
<tr>
<td>Target Audience</td>
<td>Households, Schools</td>
</tr>
</tbody>
</table>

**Objective**

This project provided training in waste management issues to a number of job seekers. These were then employed with WasteServ Malta for the duration of the project to disseminate education about waste minimization and separation methods amongst householders in Malta and Gozo.

**Initiator/coordinator**

WasteServ Malta Ltd.

**Other key actors involved**

n/a

**Duration**

September 2005 - June 2008

**Number in PW Mapping**

90

**Drafted by**

Louiselle Sciberras (WasteServ Malta), May 2011

**Contacts**

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2. Context

Malta is an archipelago in the centre of the Mediterranean Sea, about 93 km south of Sicily. The archipelago consists of three principal islands of Malta, Gozo and Comino. In 2009 the population on the Island of Malta was of 381,675 while the Islands of Gozo and Comino had an aggregate population of 31,295. The Maltese Islands (Malta) cover just over 300km² in land area, making it one of the world’s smallest and most densely populated countries.

For the past few years, waste management has become an increasingly important issue on the national agenda. The total Municipal Solid Waste (MSW) generated in Malta in 2010 was of circa 238,914 tonnes. The generation of MSW is expected to reach 249,828 tonnes in 2013 and 265,181 tonnes in 2020, growing no further thereafter. The distribution of waste generated in Malta and Gozo is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Paper and Paperboard &amp; Cartons</th>
<th>Textiles</th>
<th>Plastics and Plastic Films</th>
<th>Glass</th>
<th>Metals</th>
<th>Food and Green</th>
<th>Wood and Other Biowaste</th>
<th>Construction</th>
<th>Others</th>
<th>Total</th>
<th>BDMAW</th>
<th>Recyclables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>19.2%</td>
<td>7.0%</td>
<td>13.0%</td>
<td>4.6%</td>
<td>10.0%</td>
<td>29.5%</td>
<td>3.7%</td>
<td>1.3%</td>
<td>11.7%</td>
<td>100.0%</td>
<td>58.3%</td>
<td>46.8%</td>
</tr>
<tr>
<td>2013</td>
<td>19.3%</td>
<td>7.0%</td>
<td>13.3%</td>
<td>4.7%</td>
<td>10.2%</td>
<td>28.3%</td>
<td>4.7%</td>
<td>1.3%</td>
<td>11.2%</td>
<td>100.0%</td>
<td>58.1%</td>
<td>47.5%</td>
</tr>
<tr>
<td>2020</td>
<td>20.3%</td>
<td>7.0%</td>
<td>13.6%</td>
<td>4.9%</td>
<td>10.5%</td>
<td>26.9%</td>
<td>4.5%</td>
<td>1.3%</td>
<td>11.1%</td>
<td>100.0%</td>
<td>57.3%</td>
<td>49.3%</td>
</tr>
</tbody>
</table>

Following Malta’s accession to the European Union in May 2004, WasteServ Malta, on behalf of the Maltese Government, has embarked on a series of important measures to upgrade the local waste infrastructure. WasteServ is responsible for implementing the Solid Waste Management Strategy for the Maltese Islands. Since its establishment in 2002, WasteServ provided facilities and services in relation to waste management without impinging on the potential development that may occur within the private sector. In fact, WasteServ is intended to act as a catalyst for such operators and will only act as the ‘operator of last resort’.

New facilities are being introduced to improve the local environment while also contributing to Malta’s objective of reducing landfilled waste to reach targets set within the European Union Landfill Directive.
3. Strategy

Objectives

The objective of this project was to provide training in household waste minimisation and separation methods, techniques and practices to a number of job seekers. The training and temporary work opportunity enabled the participants to acquire new skills which improved their prospects for future employment. The task of the participants was to educate households and other interested entities about waste management issues such as waste minimisation, the separate waste collection from households and proper use of bring-in and civic amenity sites. The temporary integration of the participants in the labour market equipped them with the right skills to adapt to and be able to cope with changes in the economic environment. The employability of the participants has been improved through the training, work experience and communication skills provided by means of this project.

Preconditions

- Develop a survey about the waste management situation in the country and about people’s perceptions and knowledge. This should serve as baseline against which to measure the effectiveness of the project;
- Ensure that the right waste collection and treatment infrastructure is in place as otherwise it will be difficult to disseminate environmental education and achieve satisfactory results from the campaign.

The above preconditions have been met by this project.

Procedure

1. Employ and provide training to job seekers who are interested to work as door-to-door representatives to disseminate one-to-one environmental education amongst householders. The door-to-door representatives receive periodic training during the duration of the project to keep up-to-date about the national waste management scenario;
2. Appointments with householders are confirmed beforehand via telephone calls from the head office;
3. The training given to households focuses on the three Rs (Reduce, Reuse and Recycle). Face-to-face interaction about waste reduction include discussions about:
   - Buying goods in bulk;
   - Reconsidering superfluous purchases;
   - Purchasing products with less packaging or in packaging that is readily recycled;
   - Use towelling and cloth serviettes for meals instead of disposable ones or tissues;
   - Use washable utensils and dishes for picnics and BBQs;
   - Use the computer and email to cut down on the use of paper;
   - Use canvas bags for shopping;
   - Use rechargeable batteries or chargers;
- Repair equipment when possible;
- Reuse plastic containers, jars and tins for storing leftovers;
- Use lunch boxes instead of buying new plastic bags;
- Use refillable cartridges and toners;
- Try to resell or donate second hand items;

It was emphasised that when people reduce waste, they are protecting the environment as well as minimising their day-to-day expenses.

4. Evaluation sheets are completed by the door-to-door representatives during each house visit and are endorsed by the householders. The information within the evaluation sheets is inputted into a database and any queries are followed up by the door-to-door representatives. These evaluation sheets are therefore also a means for data collection.

5. Organize monthly meetings with the door-to-door representatives to discuss common issues and to monitor the progress of the project;

**Instruments**

Trainings as detailed above combined with other communication actions.
4. Resources

Financial Resources

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Costs</td>
<td>14,915</td>
<td>30,680</td>
</tr>
<tr>
<td>Participants</td>
<td>155,572</td>
<td>182,816</td>
</tr>
<tr>
<td>Rent of Venues for Training</td>
<td>1,046</td>
<td>5,498</td>
</tr>
<tr>
<td>Consumables</td>
<td>2,925</td>
<td>1,711</td>
</tr>
<tr>
<td>Publicity</td>
<td>30,376</td>
<td>52,226</td>
</tr>
<tr>
<td>Office Furniture and Equipment</td>
<td>1,330</td>
<td>963</td>
</tr>
<tr>
<td>TOTAL</td>
<td>206,128</td>
<td>273,894</td>
</tr>
</tbody>
</table>

This project was funded from the European Social Fund 2004-2006 with a 75% EU co-financing rate.

Human Resources

The following human resources were employed for the duration of the project on a part-time basis (18 hours per week):

- 1 Project Manager
- 1 Project Coordinator
- 18 door-to-door representatives
- 6 administrative staff

Communication Tools

Since its establishment, WasteServ has been involved in raising awareness about sustainable waste management and implementing information-based campaigns. WasteServ operates a Communications Office dedicated specifically for this purpose. Channels of communication most frequently used by WasteServ include open days at waste management facilities, participation at national trade fairs, participation in conferences, television and radio programmes, and website www.wasteservmalta.com. Communication tools applied in this project include the following:

- Launch Event
- Closure Event
- T-Shirts used by the door-to-door representatives as uniforms
- TV Commercials
- Adverts on Newspapers
- Leaflets

Allocation of resources over time

The detailed project’s budget breakdown is provided in Section 4 - Financial Resources above. The biggest expense involved the salaries of the door-to-door representatives who were paid for every house visit performed.
5. Evaluation

Results

- Participation

Project’s Phase 1 Results:

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Expected results</th>
<th>Results</th>
<th>Actually realised</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maltese Male</td>
<td>Maltese Female</td>
<td>Gozitans Male</td>
</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training 25 people or less</td>
<td>&lt;25</td>
<td>29</td>
<td>11</td>
</tr>
<tr>
<td>Number of households visited</td>
<td>20,000</td>
<td>23,327</td>
<td>9,792</td>
</tr>
<tr>
<td>Number of courses offered</td>
<td>2</td>
<td>4</td>
<td>2 courses in waste management</td>
</tr>
<tr>
<td>Results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in duration of work experience</td>
<td>45 weeks / employee</td>
<td>44 (on average)</td>
<td>40 (on average)</td>
</tr>
<tr>
<td>Satisfaction rate of beneficiaries</td>
<td>50%</td>
<td>Over 90% of the participants rated the training provided as ‘Good’ or better.</td>
<td></td>
</tr>
<tr>
<td>Acquiring of communication skills and technical knowledge by participants</td>
<td>47.5 hrs of training per participant</td>
<td>59.5 hrs of training per person (47.5 hrs in Sept 2005 &amp; 12 hrs in Apr 2006)</td>
<td>12 hrs in Apr 2006</td>
</tr>
<tr>
<td>Number of participants employed in part-time and full-time work</td>
<td>5</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Number of certified beneficiaries</td>
<td>15</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>Impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placement / integration rate of beneficiaries after assistance</td>
<td>15%</td>
<td>38%</td>
<td>50%</td>
</tr>
<tr>
<td>Number of jobs (part &amp; full time) retained / created, therefore no longer dependent on unemployment benefits</td>
<td>5</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

1 29 people attended for training in waste management and in communication skills. However, the number of weeks of employment differed between participants.
2 These figures are as at October 2006.
3 These figures are as at October 2006. Number of participants in employment / Number of participants.
### Project’s Phase 2 Results:

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Expected results</th>
<th>Actually realised as at closure of project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training 30 people or less</td>
<td>&lt;30</td>
<td>13</td>
</tr>
<tr>
<td>Number of households visited</td>
<td>25,000</td>
<td>12,775</td>
</tr>
<tr>
<td>Volume of training in participant hours</td>
<td>42</td>
<td>38.5</td>
</tr>
<tr>
<td>Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfactory rate of beneficiaries</td>
<td>70%</td>
<td>85%</td>
</tr>
<tr>
<td>Number of certified trainees</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>Number of Households with more waste</td>
<td>25,000</td>
<td>12,775</td>
</tr>
<tr>
<td>management education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placement / Integration Rate of trainees</td>
<td>5</td>
<td>13</td>
</tr>
</tbody>
</table>

### Avoided waste quantities (or toxicity)

Data of this project’s direct impact on waste minimisation is not available. However, there was a continued upward trend in the quantity of recyclable waste collected from Bring-In Sites for the duration of this project.

![Recyclable Waste Collected from Bring-In Sites](image)

### Other results
Besides for environmental benefits, this project provided training and temporary employment for job seekers.

**Impacts**

- **Avoided Costs & CO₂ equivalents**
  
  Not measured

New jobs created and retained after the project represent a saving since the persons hired will no longer depend on unemployment benefits.

- **Social Benefits**

This project provided training for job seekers; facilitated their access into the labour market, created more interest in environmental employment, and improved environmental consciousness amongst the Maltese citizens. (see ‘Results’ table above)

- **Continuation over time**

This project was carried out between 2005 and 2008. The financial resources were constant over the years as these mainly involved salaries for the door-to-door representatives. After 2008, the representatives provided training on a collective basis rather than door-to-door. Education campaigns cannot be one-shot as the effect would deteriorate after a short time. On the contrary education campaigns need to be ongoing and substantiated with updated information.

- **Difficulties encountered**

  - The administrative work load to manage the 24 door-to-door representatives was hefty.
  - Sometimes householders agreed to receive the door-to-door representatives in their homes over the phone but failed to keep the appointment.

**Monitoring System**

Indicators used were: Number of households visited, Volume of training in participant hours; Satisfaction rate of beneficiaries, Number of certified trainees, Number of Households with more waste management education, placement / Integration Rate of trainees, Number of jobs (part & full time) retained / created.

Satisfaction rate was checked:

  - Random phone checks were carried out from the office to determine whether householders found the visit by the door-to-door representative useful.
  - The evaluation sheets which were completed during the house visits by the door-to-door representatives were verified once delivered at the office.
6. Lesson learnt & recommendations

**Key factors of success**

- The door-to-door representatives should have very good communication skills for the message to be delivered across effectively.
- The door-to-door representatives should always be updated with the latest information in order to pass on the message correctly.

**Recommended Improvements / Adaptations**

The project was quite successful as it was evident that people became more informed about waste management in Malta and public participation in waste separation improved considerably in a relatively short time. Unfortunately, there was no method in place for measuring the positive effects of the project on waste minimisation hence data in this regard is not available.

**Recommended Indicators and Monitoring**

It is always very difficult to measure the effectiveness of an education and communications campaign as the direct results are not instantly visible. While evaluation sheets were collected following each house visit, these were more meant to gather information about the quality of the session rather than about the level of waste management knowledge acquired. Next time round, the evaluation sheets should be updated to collect additional information.
7. Comparison with similar action

In different location/context

Brussels Environment implemented a similar action of advice to households through community workers without the social dimension of working with unemployed.

The "Eco-guides" were a team of 5 community workers trained in waste reduction/prevention. The team’s work consisted in providing advice that had been put together by Brussels Environment (IBGE) and others to encourage people to avoid waste generation, to compost and to sort their waste. One of their tasks was to organize recurring awareness raising events for the local community at sites where a lot of people can be reached, such as fairs, large scale events, shopping centres, educational associations and farms, schools, local stores, public parks, department stores and markets.

The team was operational October 99 - June 2002. During 1 year, the team undertook more intense activities in Watermael Boitsfort of 24.000 inhabitants, one of the 19 municipalities within the Brussels region: 138 activities - 67 sites - engaged in direct and personalised dialog with 4175 people (21 sessions in the schools, 16 street festivals, 6 activities at the local weekly market, 14 animations in the local shopping centre, 5 conferences in associations), the targets were households, schools, retail shops, associations and the medical profession (as relay for the households). The close personal contacts allowed them to adapt and answer people specifically, the subjects tackled were all those related to waste prevention: anti-advertisement sticker, reusable bags, second hand, ecological purchases, composting...

Resources (budget & staff) 50% of the time of 5 persons full time + logistical supervision = roughly 125 000€ (since the team was working outside the Municipality of Watermael Boitsfort the remainder of their working hours organising scattered activities in other municipalities within the Brussels region)

Results achieved: A survey carried out in 2001, compared awareness and behaviour in the targeted municipality to those of the region as a whole:

- % of the population which had heard about the waste reduction actions: 81% in WB municipality versus 57% in the Brussels region as a whole
- Global eco-behavior index (based on about ten waste reduction behaviours): 46,6% in WB municipality versus 16,4% in the Brussels region as a whole

Main difficulties were cost per person reached; the analysis of the real quantity of waste collected specifically within the WB municipality was not possible

Further information: Brussels Environment: Joëlle Van Bambke: jva@ibgebim.be