

## **OAS Waste management Report**

**Date of Workshop -Feb 15 & 16**

**Venue: Department of the Environment, Botanical Gardens, St John's, Antigua**

The workshop was aimed at bringing key stakeholders together from the local communities, NGO, the private sector, statutory departments and government to share information on the social “people” components that are required and must be fully integrated into the Strategic Plan for Zero Waste Management in Antigua and Barbuda. The plan will take into account all the environmental and social safeguards. This training is a follow up to the earlier week of technical training held October 9-13 facilitated by the UNDP Aruba based Center of Excellence. These training processes are aimed at knowledge and information sharing to build capacities and skill sets of the local groups many of whom are involved in pilot projects aimed at recycling, up scaling, waste diversion around the concept of a circular economy where there is value in the vast we generate and able to provide employment, sustain livelihoods and reduce the waste going to the landfill. The training is being complemented and is supported by a survey currently being tested and will be conducted by the workshop participants that give an indication how people feel about the waste they generate. It will also address cultural behaviors and attitudes, aspects of income generation and linkages with the SDG's made possible just from the separation of the various waste streams. The aspects for behavioral and changes in attitudes is key to understanding the emotions of people and their feelings towards waste.

The Social “people” Component will consider and support pilot projects that can be developed as a result of a waste collection system that will benefit the waste pickers at the landfill whose health is impacted from needles, rats, pest's chemicals, mercury hazards and other hazardous conditions. The plan entails involving the vulnerable groups of waste pickers and diverting their collective actions and experiences to a collection center providing a living wage with social benefits

Richard Huber shared waste management systems that are doable and working in other countries in the Americas and showed various opportunities for pilots and their up scaling that provide multiple benefits to small island nations.

The draft survey outline and possible questions to be included were discussed at the workshop in order to get the inputs of the participants that will provide vital and key information that will be added to support and complement the environmental and economic pillars of the Strategic Plan. The survey will provide information such as personal household information, the parish where the person lives, number of persons living in the household, the job and profession of the person, a question asking about feelings when noticing garbage on the island to include tires, damaged and old cars, boats, plastics bottles electronics, food waste and other general rubbish along with rubbish heaps with a wide range of choices to answer such as always, sometimes and rarely.

The survey further tries to gauge the emotions of the local people seeking to find out if it bothers them and seeks to ascertain to what extent is waste not properly disposed of. The responses will share the feelings when things are done to help the environment, when one give away some

items e.g. books and clothes and a mobile phone when it is not being used anymore also when to reuse, recycle or up cycle items? A question relating to the home assessment such as cluttering of waste, and if proper disposal of waste is important to wellbeing, cleanliness and if persons has a willingness to pay even 1.00 per month for a more effective solid waste management system in Antigua.

The flip sides will also asked about the Negative Consequences if improper disposal continue with -health related problems vermin, fines, for public health and safety, environmental protection.

A question relating to *Locus of Control* will be asked to find out to what extend persons think that they have control over themselves, their destiny and the environment? We must know if there are events that are dependent on their own behavior.

A question relating to Fatalism will be asked which shares and inquires about a world view that assumes that events in nature and society are determined by destiny, e.g. by accepting fate which asks feeling of thinking about all the waste in the direct environment, surrounding, frustration making life more difficult and suffering thinking about the waste.

In an attempt to show to people that they are able to do something, their perceived self-efficacy which is the opposite of Fatalism is introduced into the survey. This question will share persons convictions if they are able to change something's that relate to their beliefs of their ability to dispose waste properly, ability to prevent complication from proper waste disposal like infractions, vermin, diseases and if Religious and Spiritual values help in the Coping process with Waste.

Questions also about the new ZWAB group and support for urgent actions to do something about waste and their willingness to volunteer support and time is also asked . A final question asks, if there is enough information shared nationally about the waste and garbage situation on the island and government's role. Demographic data such as the age of the person, gender, educational level marital status and income level is also included.

The survey findings will be discussed in Sept 2018 at a follow up training with Kassel University colleagues.

Other follow up component of the Waste Management workshop, is the opportunity for the workshop participants engagement and involvement in the Antigua Sailing Week Zero Waste Cup initiative where the logos of the OAS, GEF/SGP and Zero Waste Antigua and Barbuda on reusable cups specially designed for use at all functions of the events. In addition, the ASW will have a Green corner where the participants will display and demonstrate their products supported by knowledge management products. These events take place April 27-May 5<sup>th</sup> at the English harbors and are coordinated by member organization-the Antigua and Barbuda marine association.

The workshop participants gleaned from the various form of information and power points shared including the discussions that almost all small islands like Antigua face a big problem-Solid waste with negative consequences which include the: pollution of the oceans, our streets, the

air we breathe our and groundwater and human health. The situation is worsening as a result of our increase in consumption, improved living conditions, commercialization and packaging. Antigua and Barbuda is second in the world following Trinidad with 12.5 kg/capita/day with 5.5kg/capita/day 12 times over the world average and this data has been provided by the World Economic Forum in 2015. The situation is worsening because the number of people living in extreme poverty has halved over the last 25 years and the increases in consumption and are often not connected to a proper waste management system.

**Zero Waste Criteria:** includes active promotion of development, create awareness and education, sets responsibility, creates and push business and promotes the domestic market, local food production and products

**Environment Criteria includes** management and reduction of waste, recycling opportunities, protection of marine areas, pro-environmental projects eg Zero Waste Antigua Barbuda and active participation of the public, NGOs, Government, Companies, Tourism Industry

**Sustainability: criteria includes** economy (controlled development, balancing of costs and benefits), social (welfare, poverty) ecology (responsible handling of resources

The process also includes the investigation of waste disposal behaviors, qualitative and quantitative interviews involving tourists, locals, decision makers

The way forward would include looking at Incentives policies that help to accelerate the market by encouraging consumers, manufactures and supplier to switch to high efficiency products-consumer rebates, tax credits, loan financing and equipment replacement. Public sector procurement is also an effective way it is large enough to significantly influence the market as GDG ratio for public sector expenditure is 25%, also another incentive could be to reduce or eliminate import duties or sales tax-neutral revenue tax incentive-neutral on energy efficiency and higher on a less efficient one.

ZWAB is now seeking technical support for the remaining two pillars and we are now reaching out to TNO to assess the availability support through a negotiating process for these two remaining activities where they come to the island go through the process with local stakeholders to build capacity so that in the future we as local stakeholders have the knowledge that can support other island/countries in the process. This is in relation to technical and financial analysis of new technologies eg Janicki Omni processor being discussed with OAS and Erik Daron Elliott has already reached out to one of local construction companies, the second largest cement manufacturer in the island to discuss the byproducts of the ash for blending in the cement. The other by products of organic material estimated at 6 million holds great possibilities for energy production along with waste water and strengthens the environmental, economic, social components of the Strategic plan. The workshop facilitators, Mr Richard Huber of the OAS, Ms Katharina Raab, Dr Ralf Wagner and Ms Ruth Spencer all appeared on various media Houses. This included the ABS TV Good Morning Antigua and Barbuda at 7.30 am on February 13, the Dave Lester Payne Show on Observer radio on February 13<sup>th</sup> at 2pm along with several posting on the Department of the Environment face book page discussing how can we improve our Solid

Waste Management? What are the social issues that can be addressed through better management? There was also a Press briefing with many of the participants on Feb 16 with Journalist Sheralyn Beezer of the Antigua and Barbuda Broad casting station.

There was a link on DOE website: <https://environment.gov.ag/news/article/30> the waste declaration by the workshop participants.

There have been several follow up meetings to include media programs on Observer Radio Saturday morning show April 21, 8-9am with Ruth Spencer, Elliott Lincoln which has resulted in monthly waste management sessions to be programmed and this is a key avenue for public education and awareness with churches and groups reaching out to us from each program.