Environment Day 2005 Information kit

Steps to a cleaner Pacific

The theme of this year's UNEP World Environment Day is "Green Cities-Plan for the Planet". As 2005 also marks the Pacific Year of Action Against Waste, this info kit will provide a range of activities, information and resources on how to minimise waste in your community, home, workplace or school.

You can use this information to organise events and activities in your community. SPREP will be supporting a range of activities across the region to celebrate Environment Day. For more information please contact Tamara Logan at tamaral@sprep.org.

Waste in the Pacific

What is 'waste'?

Waste occurs when materials are not or cannot be used again. As we all generate waste, we all have a responsibility to minimize waste in our communities.

People and organisms have always produced waste. While there are natural systems in place to recycle a lot of waste (such as decomposition), humans are the only species that do not have a proper system for managing their waste. The management of waste will continue to be a key challenge for generations ahead.

What happens to the waste after it is taken away? Most of the rubbish is buried in landfills or placed in open dump sites. These areas are quickly filling up, and many Pacific islands do not have the space or resources for others. As most of the waste in the Pacific islands is organic, there are ways to decrease the amount of waste we throw away.

As part of the 2005 Pacific Year of Action Against Waste, SPREP is working with countries and territories to strengthen community initiatives to minimize waste. SPREP is also working closely with governments to finalise a Regional Solid Waste Management Strategy that will support the development of national action plans.

This Environment Day, take steps to a cleaner Pacific. It's about caring for our environment, how we live and what we value. We need to consider how we manage waste at home, in our communities, in the workplace and at school – there are many steps we can take to minimise the waste we generate.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

Five steps to a cleaner Pacific

Avoid

Avoid products that you use once and then thrown away. These days it's very common to buy disposable products, things that are made to be thrown away. These include nappies, plastic plates, and other materials for parties. Reduce the amount of waste you throw away by borrowing plates, knives etc for your next special occasion.

Reduce

Reduce the amount of waste you generate.

Shop for goods that will last, and can be repaired rather than replaced.

Carry reusable bags or boxes and say no to plastic bags.

Reuse

Reusing means sorting your rubbish to select materials that could be used in other ways.

Reuse items such as paper and plastic containers. Cloth bags are a better alternative to plastic bags.

Compost

Did you know that in most Pacific islands, more than 50% of the waste thrown away is organic? Return green waste to your garden to make good fertiliser for your plants and food. Set up a compost pit in your yard or village and decrease the amount of rubbish that you throw away.

Recycling

Recycling is about turning your waste into something new. Recycling conserves precious resources for your children and reduces the need for new landfills or dumps.

Where possible, sort your rubbish to separate items that can be recycled. Find out about the recycling services in your local areas. Make money from the items that you can recycle.

How are cans recycled?

After collection, aluminium cans are sorted, crushed and pressed into blocks at a materials recycling facility. These blocks are then shipped to a processing plant where they are heated to about 7,000 degrees Celsius. The recycled aluminium is then pressed and rolled out into large sheets that can be made into cans, car parts or a range of other products.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

10 steps for schools

Here are ten activities that you can use in your classroom to teach waste minimisation. These activities can be used in science, arts, music, English classes. Most of the following activities can be used with any age.

1. What type of rubbish?

Organise a rubbish collection from in and around the school yard. Take appropriate safety precautions. Have the children separate the rubbish into groups as they see fit. Record the categories on a large sheet of paper. Which types of rubbish will decay or rot when left in the soil? What can you do with the other non-biodegradable rubbish?

2. Reusing products

Ask children to look around their houses to see how products are reused. Tins as pot plants, tyres as a seat or a swing, jars being used for storage. Ask them to make a list of five items that were reused in some way. Ask the children to present their findings, make a list, and send home with the children to give to their parents.

3. Recycling

In some countries glass, paper, metal, oil and even plastics can be returned to the manufacturer for recycling. Find out if there are such opportunities in your country. If possible, organise a field trip to one of these businesses.

4. Reducing

Ask children to keep a record of family activities for a week and to keep track of the waste created through these activities. In groups, get them to analyse their records and identify the waste that could be avoided. Discuss the different ways in which they might help to reduce waste (some ideas include making better shopping choices, such as purchasing reusable containers and refusing items like plastic bags).

Why reduce our rubbish?

Rubbish does not disappear into thin air - it has to go somewhere, where it stays for a long, long time. Rubbish dumps take up lots of space, and in some cases, are the precious habitats of birds, plants and animals. If they are not managed carefully, they can be dangerous to our health and the environment.

In order to ensure that our children will enjoy the beautiful Pacific, we have to think about how our actions are affecting the world around us.

5. Traditional products: Woven coconut leaf food baskets

Teach the students to weave coconut leaf food baskets. Traditional products don't produce rubbish in the same way that imported goods or other items do. Explain the concept of 'organic' or 'biodegradable' to teach students about the different types of waste we produce, and how some of that waste can be returned to the garden.

Have the students make a list of other things that may have a natural alternative (eg: mats vs plastic tiles, natural plates vs plastic plates, thatch vs tin roof). Have them think of the positives and negatives of each of the things on the list. Postives and negatives may be about cost, convenience, image etc.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

6. Life in the past, life in the future

Have the students interview community elders or have some come to the school to talk about the changes they have seen in their communities from the past until now. What was their home like when they were children? Was there less or more waste? What products were in the stores - plastic bottles, aluminium cans, noodle packets? After the students have compared the past with the present, have them imagine what their homes might look like in the future, with more products coming into the Pacific islands. What will happen to all the waste? Where will it go?

7. Write to the Editor/radio

Encourage students to write to the local newspaper editor or radio station expressing their views about the importance of good waste management in the community.

8. Plastic bag problem

Have the students guess how many plastic bags are used in a day on your island or village, in a week, a month, a year. After they have set some predictions, have them do some research. Assign students to talk to all the storekeepers in the community. Ask them if they would participate in your survey. Ask if they would record the number of plastic bags they use in one day. What about after a week? Have the students calculate to find out how many bags are used in a month or a year.

Plastic problem

On a worldwide scale, it is estimated that more than 1 million bags are handed out *each minute*. This means that approximately 500 billion bags are used each year. It is estimated that plastic bags cause over 100,000 sea turtle and other marine animal deaths every year when animals mistake them for food. The next time you go shopping, say no to plastic bags.

9. Waste posters

Have students make posters for the community about waste issues in their community and their solutions. Some of the ideas for the posters can come from the other activities. Display the posters in stores, local businesses, or during school celebrations.

10. Write a waste rap

Have the students compose a rap song about the importance of caring for the environment through waste reduction. Have the students rap their songs on Environment Day. Invite the local radio station or TV to feature the rap songs.

Share your Environment Day/Week activities

What did your school do for Environment Day/Week? Write to Tamara Logan, Education and Social Communications Officer, SPREP, PO Box 240, Apia, Samoa or at tamaral@sprep.org.

These activities will be promoted throughout the Pacific through the SPREP web site as well as through 'Learning Grounds', a monthly newsletter for environment and sustainable development education. These activities will also be promoted as part of the Year of Action Against Waste.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

Top 10 hints to reduce waste in your home

Say "no" to plastic bags

It seems as though every time we go to the shop we are given a plastic bag...

that we usually throw away! And when these bags end up in the ocean

they can harm wildlife, like turtles, who think they are food.

The next time you go shopping, take a cloth bag or basket to the shops, and cut down on the waste you make.

1. Think before you throw – recycle where you can

2. Take your own bags to the shop/supermarket.

3. Set up a compost heap – more than 50% of the waste we generate is organic. Return it to your garden to make rich fertiliser for plants and food.

4. Choose products with less packaging

5. Choose longer lasting alternatives instead of buying foam cups and plates

6. Sort your rubbish and recycle where possible

7. Share your household tips with your neighbours

8. Teach your children about waste minimisation

9. Encourage community groups and schools to adopt waste minimisation principles

10. Have fun!

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

Community Activities

There are many community activities that you can organise as part of Environment Day/Week celebrations.

Organise a launch - organise schools to attend a launch to talk about environmental issues, including waste management. Invite elders, other members of the community and the media. Invite representatives from the local council or environment ministry.

Make a pledge - ask children to make a pledge to conserve the environment, string individual pledges together and wrap around a tree for the day. Ask the children to take these pledges back to their homes or classrooms to remember their promise.

Organise a 'Plastic Free Day' on Saturday before or after Environment Day
Meet with your local council and shopping centres to talk about activities to encourage people to bring their own bags to the supermarket. This may include community service announcements on a radio station leading up to the 'Plastic Free Day' promoting the event. Ask people to decorate their bags as part of Environment Day and offer a prize for the best basket that is brought into the stores.

Link up with a youth group to promote the 'Plastic Free Day' and to distribute information on waste wise activities.

Organise a trip to the local landfill for members of the media or a community group
Many landfills or dumps in the Pacific are filling up quickly. Most of the waste that is thrown away can be reused, recycled or composted. Encourage people to write about what they see, and distribute to the media or through other channels.

Find out about setting up a village compost area
Speak to your community about setting up a communal composting area if you do not have space in your own yard. Make a joint commitment to ensure that all organic material is composted and not thrown away. Use the compost as fertiliser to grow plants and food.

Find out about recycling services in your area
Share this information with friends and family and organise a recycling system in your community and make money the items you recycle.

Church
In some Pacific Islands, Environment Day falls on a Sunday. Talk to your church about promoting the Day. Speak about the importance of minimising waste in your community.

Organise a clean-up campaign in your community
Choose an area that you can clean up during Environment Week. Take note of what you find. Are there other ways of disposing of these items? Discuss the event with your group to talk about other ways to dispose of this waste. Promote your clean-up activity to the local media, and to your community.

Share your Environment Day activities
Share your Environment Day activities. Forward information to Tamara Logan, Education and Social Communications Officer, SPREP, PO Box 240, Apia, Samoa or at tamaral@sprep.org. These activities will be promoted through the SPREP web site, and through 'Learning Grounds', a monthly educational newsletter.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

Take action in the office!

1. Form a group of people who are interested in decreasing office waste

2. Choose and buy recycled paper if possible.

3. Think before you print - print only when necessary

4. Print on both sides

5. Use scrap paper for taking notes or messages

6. Introduce a 'no disposables' policy into the workplace, encourage people to bring their own cups and plates

7. Encourage recycling where possible. Encourage your office to set up a recycling scheme.

8. Measure the amount of paper being used in an office and try to cut down on use. Measure your success.

9. Recognise office champions

10. Promote your good work! Take action to help the environment and share your success with others.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

Where does 'waste' come from?

Aluminium cans

Aluminium is a kind of metal made from bauxite ore that is mined from the ground. Ore is metal in its original state, before it has been processed. Ore is a non-renewable resource, which means that there is a limited amount of it in the earth and when it is used up and gone, there will be no more. Getting ore from the ground damages the environment. It very important to limit our use of it and to recycle metal whenever possible. When a factory makes a new drink can from an old drink can, it only takes about 5% of the energy that it takes to make it from the original materials.

Glass

Glass is made from soda, ash, sand and lime. They are heated until they turn into liquid and then shaped into whatever form is needed. The materials are pretty easy to get and it's easy to make, that's why glass has been around for a couple of centuries now. It is easy to recycle glass. Glass that is returned to the glass factories can be melted down and re-made into glass. It can be recycled again and again without losing its strength or changing its qualities. In many countries, people receive money when they return their bottles, and these bottles are cleaned and reused.

Paper

Paper is made from trees, a renewable resource. However, we need to plan carefully to manage these resources to ensure that there will be some for future generations. The wood from trees is shredded into very small pieces. Water and chemicals are added to turn the wood chips into pulp. Then the pulp is spread out thin on screens and dried with heat. People have been making paper for thousands of years.

Paper can be recycled by removing the ink and shredding it again to make the new paper.

Although many Pacific islands cannot recycle paper, there are things that we can do to cut down on our use of paper.

Plastic

Plastic is made from petroleum (oil) that is drilled from the earth. To drill oil from the earth, people use a very deep well and pump. Factories use the oil and other chemicals to mould plastic of all shapes, textures, colours, strengths etc. Making plastic is a very dirty job. There are lots of poisons and pollutants that hurt the environment as plastic is being made. It's important to use as little plastic as possible, because it is bad for the environment, both as it is being made, and later when it's thrown away.

Recycling plastics is difficult. It can be done, but the plastics have to be sorted very carefullly, and it takes a lot of energy to recycle the plastic. However, it is important to recycle plastic where possible because the oil it is made from is a non-renewable resource.

Tin cans

Tins cans are made from iron ore and tin. Both are metals that are mined from the ground like aluminium cans. They are also non-renewable, and so it is important to reuse and recycle tin cans where possible.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

Composting

Much of the rubbish in the Pacific is organic meaning that it comes from plants and animals. But it is not really rubbish at all. By composting or recycling it, we can turn it into fertiliser to grow plants and food.

What is composting?

Composting is the method of breaking down organic material in a large container or heap. Composting can convert organic waste into a dark coloured soil that can be used to enrich our garden's growth and performance. Composting has been traditionally practiced throughout the Pacific for generations.

Why compost?

As population and consumption increase, so does the amount of waste, creating one of the Pacific's biggest environmental problems. In most Pacific islands, more than 50% of the waste thrown away is organic and can be returned to your gardens to make rich fertiliser.

Composting is a good idea as it:

- helps you save money on potting mixes and fertilisers
- cuts down on the amount of waste we throw away
- improves the conditions of soils
- reduces the need for new landfills or dumps

7-steps to a richer garden - how to compost

The easiest way to compost is to throw your organic scraps into your garden and wait for nature to take its course. However, there are a few steps you can take to speed up this process.

1. Mark an area of about 2m square on the ground, clearing any stones or wood
2. Lay a piece of plastic down on the ground
3. Build a frame to mark the space and contain the compost
4. Layer the compost with alternate layers of waste and soil
5. Remember to turn with a spade every couple of weeks
6. Cover the compost with a plastic sheet or tarpaulin to keep the heat in and the rain out
7. When the compost looks like dark loose earth, mix it into the soil in your garden and watch your plants grow!

You can easily start composting in old garbage bins, wooden boxes, compost bins or place your organic material in a corner in the garden away from the house.

What to put into your compost: the 50/50 rule

Greens: nitrogen rich wastes, kitchen food scraps, fruit peels, coffee grounds, tea bags, grass and plant clippings, animal manure, fish bones, seaweed.

Browns: high in carbon and other elements, dried leaves, sawdust, wood shavings, hay, shredded paper, egg shells, wood ash.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

What not to put in your compost

Meat, grease, fat, dairy products, large bones, food packaging, plastics, treated wood products, under-ground stems, coal ash

Care for your compost heap

- Turn your heap: after it heats up, or if it becomes too wet
- Add brown material if it develops a bad odour

When is it ready to use?

Compost is ready to use after two or three turnings, when it looks rich and dark.

Tips for better composting

- The nutritional value of the compost depends on the type of materials used in the compost
- Adding animal manure to the compost will not only speed up the decomposition but also improve its nutritional value
- Turn your compost regularly with a spade to help the air get in. Air is essential for efficient composting. Lack of air causes the organic material to compost slowly and creates odours
- Keep the compost covered to keep in the heat and to keep out the rain

Adapted from: Composting, from household waste to your garden, The Department of Environment, Suva and Home Composting, Ministry of Natural Resources and Environment/ JICA, Samoa.

Banana Circle - Kiribati

INTERNATIONAL WATERS of the Pacific Islands

A banana circle is a simple composting method where several banana trees are planted around a hole lined with cardboard and any plant waste is simply placed in the hole. Sometimes grey water from the kitchen or laundry is piped in to feed the banana roots. This helps to keep organics out of the landfill, and also provides food for the family by producing bountiful bananas.

The Banana Circle is used in Kiribati as part of Kaoki Mange!/SPREP's International Waters Project. For more information please contact Steve Menzies, Communications Specialist, International Waters Project, stevem@sprep.org.

Produced by SPREP for Environment Day/Week 2005 as part of the Pacific Year of Action Against Waste

List of kit resources

'Year of Action Against Waste' posters

Calico bags - 'Say no to plastic' bags, Beautiful Pacific marine theme

'Stop Solid Waste' posters

'Do not litter' posters

'What a Waste' comic books

Pacific Freshwater Kits

'Conserving our Unique Heritage' posters

CD-Rom - Information kit, Year of Waste information

Contact details

Tamara Logan
Education and Social Communications Officer
Secretariat of the Pacific Regional Environment Programme (SPREP)
PO Box 240
Apia, SAMOA

T: (+685) 21929 x 306
F: (+685) 20231
E: tamaral@sprep.org

www.sprep.org

Acknowledgements

NZAID

UNEP

International Waters Project, SPREP

Eleni Tokaduadua, Ministry of Local Government, Housing, Squatter Settlement and Environment, Suva, Fiji

Tuiolo Schuster and Frances Brown, Ministry of Natural Resources and Environment, Apia, Samoa