

# **Fiji International Waters Project**

## **Strengthening the Management of Waste in Fiji's Rural Communities**

### **COMMUNICATIONS STRATEGY**

**September 2005**

#### **1. Introduction**

The objective of the Fiji International Waters Project Fiji (IWPFJ) is to identify cost-effective ways to strengthen the management of solid and liquid waste in Fiji's rural communities.

The Fiji IWP is managed by the Ministry of Local Government, Housing, Squatter Settlement and Environment in collaboration with the Pacific Regional Environment Programme (SPREP).

The IWP is working with the villages of Vunisinu and Nalase located one hour north of Suva in the province of Rewa. These villages have a combined population of just over 200 people.

The pilot project is intended to promote increased community involvement and responsibility for community-based waste reduction. It is hoped that the pilot community could model effective waste management systems for similar rural, coastal communities.

It is also hoped that the practical lessons from the IWP will assist in the development and implementation of solid & liquid waste management strategies for Fiji's rural communities.

#### **a) What is the problem?**

The number of people living in Fiji's rural and peri-urban areas is greater than the country's urban population. However the Rural Local Authorities (RLA's) do not have enough resources to provide adequate rubbish disposal services to these rural areas.

This has led to emergence of 'mini dumps', which are mostly located near waterways and in mangroves. Other popular methods of disposal include open burning and illegal dumping.

Most people don't understand the impacts of improper waste management on human health and on the economy, or how to implement alternatives such as recycling and composting.

The Fiji IWP pilot communities of Vunisinu and Nalase had been throwing their rubbish in the mangroves and in the river that runs by the village. These open dumps are not covered and they include green waste, inorganic and hazardous waste (such as batteries). The waste stream survey at the pilot sites revealed that more than 80% of village "waste" actually consists of organic and recyclable material.

Fiji's first environmentally "safe" landfill is expected to be operational at Naboro, near Suva, in 2005. However this landfill will not serve the many thousands of people living in Fiji's rural communities.

There are overlaps in the existing legislation and there is no one agency with a clear accountability/responsibility for managing waste in Fiji. For example the Ministry of Health continues to promote a “burn and bury” approach, while the Department of Environment promotes composting, reuse, recycling not burning.

Effluent from septic tanks and pit latrines also contribute to the pollution loading of coastal waters. High levels of nutrient and faecal coliform not only impacts on the environment but on human health as well. For rural communities in sensitive low-lying areas with high water table such as the IWP pilot project site, compost toilets could be a useful solution.

Like human waste, Pig waste management is fast becoming a major contributor to the nutrient loadings in the coastal areas. In Fiji most of the pigpens are located beside the waterways.

### **b) What is the IWP doing to address these problems?**

The IWF has been working with the villages of Vunisinu and Nalase to develop a waste management system that includes:

- Composting (kitchen/green waste)
- Recycling (P.E.T, lead-acid batteries, cardboards, papers and aluminium cans)
- Reducing the use of plastic bags by using cloth bags
- Reducing water pollution through composting human and pig waste.

When the pilot site was selected a Village Environment Committee (VEC) was formed that included representatives from Nalase and Vunisinu. Participatory workshops were used to help the communities identify the root causes of their environmental problems. After the communities identified waste as a priority issue they then set about developing and implementing a series of practical, low-cost, solutions.

The open dumps have been cleared and 42 out of 57 households are now composting organic material for their gardens. The IWP is working with a private recycling company to establish a recycling centre for the villages and skip bins have been installed for collection of waste that cannot be recycled or composted.

At the moment each household is required to pay FJD5.00 per month for waste management and some villagers find it difficult to afford this amount. The IWP is now preparing a study to try and understand the ongoing economic viability of this system and working with RLA and the Ministry of Fijian Affairs to determine if there are any more cost-effective options.

The IWP is also encouraging community members to use composting toilet as an environmentally safe alternative to their current pit/septic toilets. The IWP is supporting the introduction of a “wheelie-bin” composting toilet designed by the resident Peacecorps volunteer and funded by the Institute of Applied Sciences.

IWP is also working with the PeaceCorps volunteer, SPC, the University of the Western Sydney, and USP on developing solutions for composting pig waste.

At the community level the IWP has been successful in helping people to understand the impacts of improper waste management on their health and their quality of life, and how they can turn their “waste” into a valuable resource.

### **c) How is IWP contributing towards Fiji’s National Waste Strategy**

Fiji’s Department of Environment is keen to promote a more integrated waste management system where Government and the business sector can work together to make it easier for the public to minimise waste at source. An integrated approach would include economic instruments, public education, together with the threat of enforcement if people did not comply.

Fiji has a National Waste Management Committee but currently its plans are ad hoc and short term rather than strategic. At the national level the IWP is trying to show how the waste management solutions being piloted in Vunisinu can be applied in rural communities throughout Fiji. The IWP is trying to encourage more RLA involvement in waste management and the project is also contributing practical advice towards the development and implementation of national strategies for both solid and liquid waste.

The IWP is working with the Forum Secretariat and SPREP to conduct a study to evaluate the economic impacts of waste on things like human health and tourism.

IWP is working on the development of a national recycling campaign to encourage the collection and disposal of recyclable material from Fiji’s rural communities. There have also been discussions on the introduction of economic instruments such as levy and refund for returning items such as PET bottles and aluminium cans.

## **2. Audiences**

The IWP’s target audience can be divided into three main groups.

### **a) Internal Audiences**

It is important to note that there are currently overlapping activities within the DOE which is assumed to be because of the organisational structure. Vertical as well as horizontal collaboration with other Units at the DOE will help address this concern. IWP has highlighted this and is working with the Director of Environment to ensure that resources are not wasted by duplicating efforts.

### **b) Project Partners**

This includes groups and individuals with a mutual interest in improving the management of solid and liquid waste in Fiji. In order for our communications to be effective at the local and national level we need to ensure that we work closely with those partners that have a shared interest in communicating our key messages to the rural communities and the general public of Fiji.

Waste problems in Fiji require urgent attention by all stakeholders i.e. the community at large, the Government, Non-Government Organizations (NGOs), Inter-Governmental Organizations (IGOS) and most importantly the private sector. The IWP have been working closely with the following project partners to address the solid and liquid waste problems:

- SPC/University of Western Sydney/WHO/PeaceCorp (pig waste composting)

- USP/IAS/PeaceCorps (composting Toilet)
- PeaceCorps (Household composting)
- Rural Local Authorities (Ministry of Health)/WasteCare (Waste Management)
- CocaCola Amatil/Narseys plastics /Waste Recyclers (Recycling), Pacific Batteries
- MSP/IOI (PPP&D)
- Suva Harbour NGO (community activities replication)
- PCDF (Community waste management)
- Ministry of Fijian Affairs/Provincial Officers/Multi-ethnic Affairs/National Council of Women/Ministry of Women and Culture (community capacity building (CCB) project and replication)
- DOE (National Solid and Liquid Waste Management Strategy)
- OISCA/JICA (composting and mangrove replanting)
- PWD (Water quality monitoring)
- Forum Secretariat (Economic Evaluation)

**c) the pilot community**

Target Audience	Rating	Description	Comments
<b>a) Internal</b>			
<b>Ministry of Local Government, Housing, Squatter Settlement and Environment</b>	<b>10/10</b> *Awareness and understanding of IWP's objectives, processes and benefits	Minister DOE PEO Waste Officer JICA Volunteer	Current understanding of the IWP amongst the management of the lead agency is "excellent"
	8/10	POPS Unit A/Coordinator (provides secretariat to the NWMS formulation)  Awareness Officer	Work together on waste related activities
	9/10	CEO	The CEO supports National level activities under IWP and is appreciative of community activities as well
<b>Wider government - decision makers</b>	8/10	The Ministry of Health  The Ministry of Health administers the Public Health Act under which falls the RLAs	There are conflicting roles and responsibilities with regards to waste management and minimisation. Other issues include Ministry of Health is promoting "burn and bury", whilst IWP and DOE are promoting composting, reusing, recycling and refusing and not burning.
<b>Project Development</b>	10/10	Floyd Robinson– PCDF Alena Lewadrau –	All members are fully supportive of IWP's

Team		SOPAC Sher Singh– PWD	efforts
<b>National Task Force</b>	10/10	<p>Epeli Nasome Department of Environment (Chair)</p> <p>Professor Bill Aalbersberg, IAS/USP</p> <p>Alena Lewadravu SOPAC</p> <p>Alice Heffernan Suva Harbour Foundation</p> <p>Winifereti Nainoca FIT</p> <p>Merewai Toganivalu SPC</p> <p>Timothy Young Ministry of Health</p> <p>Manoa Malani Ministry of Tourism</p> <p>Tevita Dawai Ministry of National Planning</p> <p>Etika Rupeni WWF</p> <p>Lilieta Gavidu Ministry of Regional Development and Fijian Affairs</p> <p>Floyd Robinson PCDF</p> <p>Sher Singh PWD</p> <p>Sally Asker Live and Learn</p> <p>Pita Vatucawaqa Village Liaison</p>	

		Mary Ackley PeaceCorps	
<b>b. Key Project Partners</b>			
Village Environment Committee		Pita Vatucawaqa Ro Siteri Kamakorewa	Responsible for the collection and disposal of household rubbish.
PeaceCorps	9/10	Mary Ackley	Based at the pilot site.
Waste Care	7/10	Subash Chand	Supports IWP's efforts but does not see waste collection from rural areas as economically viable.
SPC/Uni. Of Western Sydney	10/10	Peter Manueli Gavin Ramsay	
OISCA/JICA	10/10	Yurie K Gunji	Supports IWP's initiatives (composting)
MSP	10/10	Dr Joeli Veitayaki USP	
IAS	10/10	Professor Bill Aalbersberg	
Ministry of Health/WHO	9/10 7/10	Timothy Young  Steve Iddings	
Regional Development and FAB	8/10	Liliate Gavidu	Has requested for IWP to assist with waste management which will be part of the CCB project
<b>c) Vunisinu and Nalase pilot community</b>			
Village Environment Committee	8/10	Mr. Pita Rokosuka Vatucawaqa Ms. Siteri Raimuria Ms. Akosita Bavai Ms. Meresimani Muria Mr. Rusiate Rokosuka Ro Viliame Rasigatale Mr. Necani Rasiga Ro Siteri Kamaicorewa Mr. Viliame Saumatua Mr. Josaia Tavua Rasiga Mr. Sanaila Taubuli Ms. Emi Navunisaravi Ms. Meredani Rasiga	All committee members are trained local facilitators

		Ms. Talei Bogidrau	
Village Chief And his wife	7/10	Joji Bukarau	
Church leader	9/10	Reverend Alipate Raburau	One of the facilitators, very passionate about environment.
Navuvola Development Committee	9/10	Mr. Tevita Bukarau (Chairman) Cama Raimuri	
Women's group	8/10		The village women have been very active during clean-ups. During community workshops more women participated than men. More awareness of IWP's objectives is required.
<b>d. Wider public</b>	<b>5/10</b>		<b>Very limited involvement to-date</b>

### 3. Issues

#### Community

- Littering is still occurring;
- Some community members are not paying for the Skip bins;
- Many people still put all their mixed waste into Skip bins
- 26% of the total households are still not composting;
- Some members of the community still want flush toilets;
- Community members still not sure how pig waste composting will work
- The RLA does not have resources to serve the communities waste management needs;
- It is not economical for private waste collectors to serve the rural communities

#### National

- There is no one agency with a clear accountability/responsibility for managing waste in Fiji's rural communities
- Need to ensure that the Fiji's National Waste Strategy incorporates IWP's Community based lessons and clear targets for minimising waste in rural communities
- **Industry is not supportive of the CDL system proposed by the Government. Alternatively they are proposing a Permit system;**

#### General public

- Majority of the people of Fiji don't understand the impacts of improper waste management on human health and on the economy
- Majority of the people of Fiji also don't know how or what to recycle or compost

## **4. Communications Objectives**

### **a) Community**

To raise awareness of the impacts of improper waste management on the environment, health, and quality of life

To promote the benefits of the following key waste reduction behaviours:

- Composting (kitchen/green waste)
- Recycling (P.E.T, lead-acid batteries, cardboard and aluminium cans) the target is to achieve a 20% increase in the amount of waste sent to recycling companies
- Only put non-recyclable/compostable “rubbish” in the Skip Bin
- Encourage people to see the value and benefits in paying for good waste disposal
- Reduce littering
- Reduce use of plastic bags by using cloth bags
- Reduce dumping of waste in open dumps
- Reduce burning of plastics, papers, and other materials
- Promote the use of composting toilets
- Promote the composting of pig waste

### **b) National Level**

- To encourage Government to develop and implement a National Strategy for Solid Waste with clear targets for rural communities
- To encourage Government to develop and implement a National Strategy for Liquid Waste with clear targets for rural communities
- To show how the IWP can contribute practical lessons for the development and implementation of National Strategies for Solid and Liquid Waste
- To encourage more RLA involvement in waste management
- To promote the benefits of composting (kitchen/green waste, animal and human waste)
- To promote the development of a national recycling programme and campaign for P.E.T, paper, metals, cardboards and Aluminium cans

## **5. Messages**

The IWP is attempting to promote the following key messages:

### **Community**

- Stop dumping your rubbish near waterways and in mangroves
- Don't litter, keep your village clean
- Compost your green waste and use it in your gardens instead of fertilizers
- Separate your cans, plastics, cardboard, P.E.T bottles and batteries for recycling
- Pay for the Skip bin service
- Only put non-organic, non-recyclable rubbish in the Skip bins
- Replace septic/pit toilets with compost toilets
- Move pig pens away from waterways
- Compost pig waste and use it on your gardens
- Share lessons on waste management with neighbouring villages



## **National**

- The IWP has worked to find practical, low-cost solutions to reduce the impact of waste in Fiji's rural communities
- The lessons from the IWP can be applied in rural communities throughout Fiji
- These lessons must be incorporated into any national plans for solid/liquid waste management
- We need clear targets for waste reduction in Fiji's rural communities

## **6. Communications Strategy**

To date the communications programme for IWFJ has largely been focused on creating an initial “presence” for the project and the promotion of best practices in waste management within the community and with potential stakeholders.

Communications activities included:

- Placement of project signs at the pilot project site
- Radio programs aired to introduce the IWPFJ and to clarify its objectives and short and long-term plans
- Newspaper articles on IWP activities
- Radio spots, Newspaper supplements and District workshops to call for EOIs
- Regular newsletters to provide stakeholders with IWP news
- Initial community consultations
- Community Project Planning & Design workshops
- Facilitators Train the Trainers workshop (baseline data collection and composting)
- Meetings with Village heads
- Awareness Brochures on Importance of Mangroves
- Children's Awareness Workshop.
- Children's competition
- Public signs to discourage illegal dumping in the community
- Article in UN Works and SPREP website to promote community “champion”
- Management profile of Director of Environment posted on SPREP website
- IWP Fiji Website
- Seminars on proper waste management in Koronivia community
- Meetings with Rural Local Authorities
- IWP FAQ translated in Fijian
- Fijian Newsletters
- Village Liaison interviewed by ABC and local radio stations
- IWP Launch aired on Dateline Fiji
- NC interviewed on Fiji One News on outdated legislations

After successfully demonstrating the best practices in community-based waste management and minimization, IWP is in a strong position to help consolidate and strengthen the management of the Fiji's solid and liquid waste.

Now the IWP will engage in a series of communications activities to prepare for and promote:

- Best-practices in waste management (as above)
- The National Waste Strategy – including the development of specific time bound targets for the reduction of waste to landfill, littering, illegal dumping and the promotion of the recycling, and composting.

- The National Liquid Waste Management Strategy
- The deposit/refund system or any other alternative that will be effective in Fiji to manage waste

The above will be done through:

### **1. Brochures**

The IWP will develop a simple brochure to help explain the objectives and “rationale” of the project to stakeholders at the national level. A Recycling and Composting Brochure will be designed for the campaign. Note: all the brochures will be translated into Fijian

### **2. Print Media**

IWP with assistance from SPREP will commission a local journalist to write a feature article explaining how the IWP is helping to reduce waste by:

- Working in partnership with the community, line government ministries, RLA, and town councils;
- Finding practical ways to strengthen the management of waste at the National level

### **3. Community Champion Profile**

IWP will profile Ami Navunisaravi who is an active Village Environment Committee member and the village nurse.

### **4. Posters**

IWPFJ will be producing posters for distribution to households as a useful way of reinforcing what we would like people to do in terms of sorting their waste and what are the benefits of sorting.

### **5. Newspapers**

Press releases and supplement articles to promote the IWP and best practices in waste management such as recycling and composting.

### **6. Radio**

The IWP is embarking on a radio campaign on recycling and composting. Radio will be used as the central platform for getting the message across to all parts of the Fiji (Rural and urban).

The project will work with local radio stations (Viti FM, FM 96 and Navtarang) to produce 30-second advertisements focusing on recycling and composting. IWP selected to work with the above stations because they have a wider coverage in Fiji.

The radio program will also include talkback shows and competitions.

### **7. Video Documentary**

IWP is working with the USP Media Center to produce a 8-10 -minute documentary on the community pilot projects. The video will be used for USP teaching purposes and also for public awareness campaigns by NGOs and line Government ministries working in the area of waste management.

### **8. Billboards/outdoor signage**

The billboards will be used promote the key messages on recycling and composting IWP will place the billboard near \_\_\_\_\_. This is the most commonly used route. The billboard will target motorists.

## 9. Community drama Group

Some community members are already working on a waste management drama

## 10. National workshops

A workshop to share best practices in community based waste management is planned for late June early July 2005.

A CDL and or any other mechanism for PET management workshop is planned for the 18<sup>th</sup> May 2005.

## 11. Cash for Trash Campaign

Usage of IWPFJ resources and audience focus groups to design and implement a national campaign to promote recycling.

## 7. Implementation

The communications programme for the Fiji IWP requires a staged approach – from raising awareness of the problem, to the development of appropriate solutions, and then on to sustained behaviour change.

What	Why	Audience	When	Who	Costs
Frequently Asked questionnaire	To raise awareness of the Project	Government/General Public	January 2003	Sandeep	N/A
Initial Awareness raising Workshop	As above	Vunisinu and Nalase Community	December 2003	Sandeep	N/A
Waste management Seminar	To raise awareness of the project	Koronivia Community	June 2004	Sandeep/Marilyn	N/A
Mangrove Brochure	To raise peoples awareness on the importance of Mangroves	Govt/General Public	June 2004	Sandeep/Marilyn	N/A
Project Brochure	The brochure will clarify how the IWP is working in Fiji to strengthen the management of Solid and Liquid waste at the community and national level.  This will be the first attempt to provide a complete picture of what the	The brochure will be distributed to community, national and regional stakeholders and placed in the IWP website.	June 2005	Sandeep /Steve	Cost of printing

	project is attempting to do at the community and national levels.				
Composting Brochure (English and Fijian)	To provide people with information on how to compost	National/community stakeholders	June 2005	Sandeep /Lusi	Cost of printing
Plastic bag fact Brochure	To raise people's awareness on the plastic bag pollution in Fiji	National/Community Stakeholders	June 2005	Sandeep /Shereen	Cost of printing
PET and Aluminium Can Brochure	To raise people's awareness on the recycling i.e what to recycle	General Public	June 2005	Sandeep /Shereen	Cost of Printing
Profile Community Champion- Ami	Provide a community perspective of the problem and the potential solutions. The profile will be used in a range of media, posted on the IWP website, and emailed to relevant stakeholders and used for international exhibition on water and sanitation.	National/regional/international (IW:Learn) Stakeholders	June 05	Sandeep/ Lusi	N/A
Magazine Feature Article	To provide a "complete picture" of what the IWPFJ is doing to strengthen the management of Solid and Liquid Waste at the community and national level.	Regional and National stakeholders	June 05	Sandeep/ Steve/ Tamani	SPREP to take care of costs

Video documentary	Demonstration projects for awareness and teaching purposes	Community/national	May	NC/Assistant	6,100
10-minute Radio Programme	To promote a complete picture of what the IWP is trying to achieve at the community and national level	Community/National	June		
Community drama	To use the drama group to promote best-practices in waste management	Community	June	Assistant	
National workshop	To share community based best practises in waste management	Community and national	July	NC/Volunteer	3000
<b>CASH FOR TRASH CAMPAIGN</b>					
Development of Communications Team and National Campaign	To develop a campaign plan and assign tasks	DOE staff Recycling companies Media reps	May	NC/IWP Assistant	No Cost
Pre-test Radio spots	To refine radio messages	3 sets of stakeholders General Public (a private company worker, a cleaner, a student) Recycling companies DOE staff, Lawyer, Garment factory worker and a civil servant	May 2005	Sandeep/ Lusi/Sher een/Radio staff	No cost
Telephone Audience survey	Understand public perceptions on recycling	100 plus from Viti Levu randomly selected	June 2005	Sandeep/ Shereen	Phone charges
Radio Programme	30 second radio spots to raise awareness of	All Fijians (the radio adv has been prepared	June 2005	Sandeep/ Lusi	Advertising costs/co

	need to recycle and compost and to promote the project – will include competition on recycling and some talk back shows	in Fijian, English and Hindi)			mpetitio n prizes
Poster	Promote Recycling	Community and General Public	June 05	NC/Assist ant/Volunt eer	Printing and Distributi on
Press Release and newspaper supplements	Promote IWP activities and best-practices in waste management	Community/nati onal/Regional	May (monthly)	NC/Assist ant/Volunt eer	Printing and Distributi on
Billboards	To promote recycling and composting and being responsible	Greater Suva area (all those who come to Suva for work)	June	NC/assist ant/Volunt eer	2000

### Audience Survey

A quick audience survey or series of focus groups will be carried out to obtain information about People's reactions to promotional materials developed for promotional purposes. This is done to communicate some of the key messages to key audience and to improve the quality and effect of these materials.

### 8. Measurement

Indicators	How measure?
<b>Community</b>	
Increased household composting # of householders composting	Village heads/facilitators count
Increase in recycling	Amount of recycling pickups (recycling companies) Money generated
Reduced dumping and littering	Village heads monitor and issue warnings and penalties
Show change in awareness/attitudes towards composting toilet # of composting toilets constructed at maintained	Informal and formal Questionnaires
Reduced plastic bags	Women's sales of the cloth bag
Waste stream analysis to show changes	

<b>National</b>	
National Waste Strategy adopted and implemented	
National Liquid waste Strategy adopted and implemented	
Increased composting (less green waste ending up at the municipal dumps)	Town/City Councils

<b>Get Cash for Trash Campaign</b>	
CDL enacted either as a regulation under EMA or as a separate legislation	DOE record of discussions
Media From talk back shows you can gauge the interest of the community to manage waste	Number of media items produced and distributed – posters, articles, radio spots, public signs, billboards, video screenings etc
20% Increase in the amount of recyclables sent to the recycling companies (data from recycling companies) recyclables ending up at the dumps	Data from recycling companies