

管理運営団体

じゅんなま研

NPO法人循環生活研究所



■ Composting organic matters surrounding us

Spread, research and disseminate method (conducts 400 lectures / year)

■ Operate vegetable farms and holding seminars (8 farms)

■ Staff training and cap.building

Compost / 「half-agri.urban」 program

■ Events for Children

(Kids recycle village・Kids flee market・Junkan (Circular) School)

■ Partnership Program

Betta-group (3 NPOs)

Japan Environment Preservation Volunteer Network

■ Little Circular Farm / Flee Market





# Various Types of Lectures on Composting



# Utilization of community resource / Composting with community people and Children



# Expected outcomes by recycling kitchen waste within the community

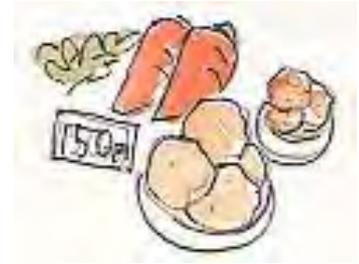
From a small recycling to a better life



Establish a system which utilize mutual resource built until now and reduce investment, cost and risk.



*Kitchen waste*



# Return Nutrition from Earth to Earth



*compost*



# Our Accomplishments on Reduction of CO2 Emissions

## Reduction of Environmental Burdens

Cardboard Composting methods disseminated in FY 2010  
to:

**75, 602 people**

Equivalent to approx. **5,292 tons**/year/CO2

$50\text{Kg} \times 75,602\text{人} \times 4 \times 0.35$  (account from jun-namaken, Fukuoka)

## Additional Effects

- ◆ Recycling of regional resources (greening, reduction of fertilizers)
- ◆ Promotion of Eco-bags (reduction on plastic bags)
- ◆ Reduction of garbage bags
- ◆ Reduction of incineration related cost  
(kitchen waste accounts for 30-40% of household waste)
- ◆ Community Development and Information Exchange
- ◆ Mobilization of Regional Human resources (Capacity building)

# Advantages and Issues of Composting

	Parks • Outside	Containers	Cardboard Box
			
Space	Requires a lot	Requires little space	Requires little space Where it will not rain
Container	None required	Is very durable	To be replaced as necessary
Care	Requires a lot of care	Relatively less care	No care required
Decompost Speed	Relatively fast, subject to care	Relatively fast, subject to care	Fast
Odor	Bad Odor	Has some Odor	Almost No Odor
Easy to Mix	Very easy to mix	Less easy to mix	Very easy to mix
Animals Insects	Could easily tamper in	Could relatively tamper in	Less likely to tamper in

# Cardboard box compost

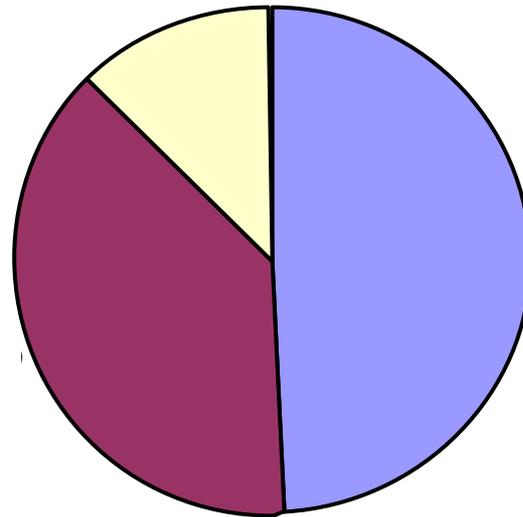
Cardboard box = Simple moisture adjustment

- Even beginners can't go wrong
- You can quit anytime
- You can compost even without a yard
- Cheap



# Why do you compost?

Because it is  
cheap 13%



Because it  
is easy  
49%

Because  
it is fun  
38%



How to make a Cardboard Box Compost



Not rice buss!!

Peat moss  
And  
Burned rice  
hulls

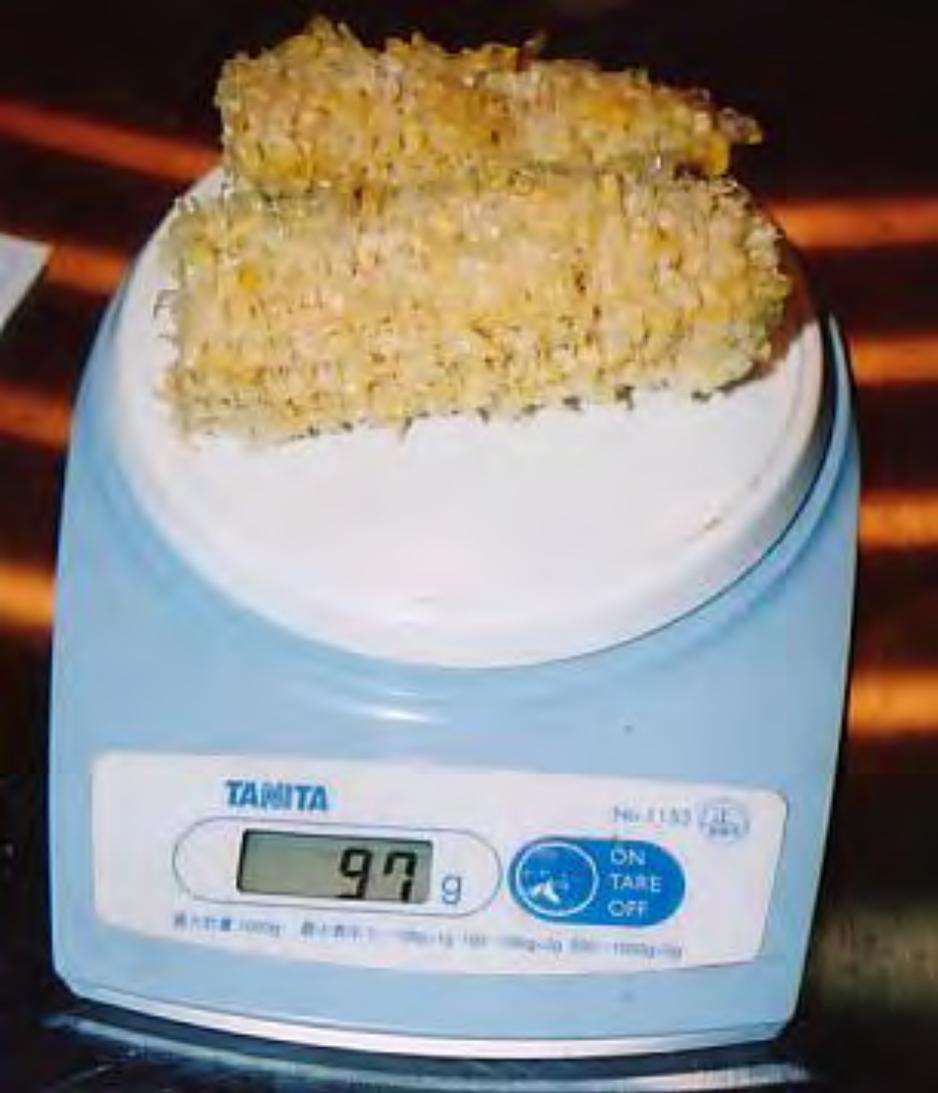
Compost-cap

# Charred Risk Husks & Coconuts peat in Batta Composting



# How Food De-composts





Corn crumbles in 3-4 weeks.

Microbes are working hard around the bone.



Corn and green soybeans becomes only fibers.



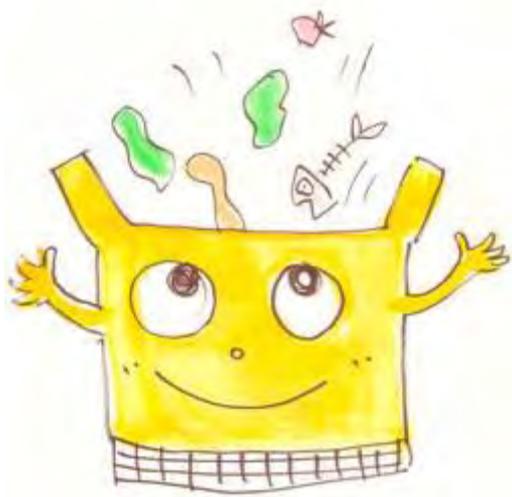
The temperature becomes  
high & low



**start**

**After 3 monthes**





schedule



Kitchen waste  
disposed in the compost

ripen

Use

About 3 monthes

3weeks

keep



■ Place the box where the rain will not fall on top

【What to do daily】

Place the kitchen waste mix

Cover the lid



【amount of kitchen waste】

500g ~ 1kg/per day

Waste bits should be small enough to mix

No shells(clams)



Make sure to close the lid and cover



**Community Garden**  
**Role of educational farm for citizens, pre-schools, elementary schools and universities**



**Nurturing and sustaining  
resource recycling  
technology in the community**

**Community ties strengthen  
through vegetable gardens**



# Safe vegetables Great Taste

'4R' a mechanism established within the community where urban farmers can make sustainable profit

Local(Region)

Low technology

Low cost

Low environmental impact



# Comparison of compost used vegetables and vegetables sold at supermarkets: a homework research by secondary school student

After 4 days



After 7 days



# Half-urban Half-farmer seminar

## Resource Recycling Based Farming



A mechanism where urban residents can create composts on their porch and grow vegetables

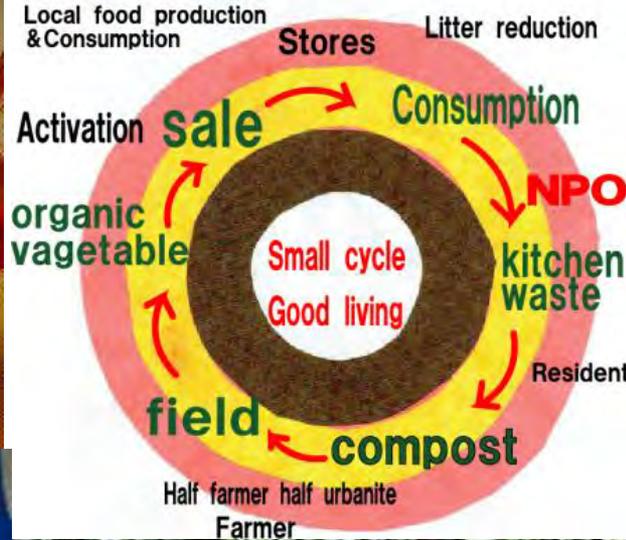


# Small Cycle Farm

Community inside the 2 km circle, where people can see each others' faces, where a ring of wisdom is circulating, where people do not generate kitchen waste and protect ground and food by eating.



From a small recycling to a better life



# Small recycle-system By Jun-namaken



- know
- Try
- See
- Feel
- Think
- Do



Reduction of waste

Safe foods

vitalization of community

Building partnership

job creation





**UN-HABITAT**  
United Nations Human Settlements Programme



japan

*in Japanese alphabetical order by surname*



**Ms Yuiko Taira**

*Director, (NPO) Jun-nama-ken ("Cyclical Living Research Institute")*

Ms Taira leads many training and collaboration efforts for Jun-nama-ken. As a Cardboard Compost Trainer, she has worked with groups ranging from local households to foreign government officials. She has been recognized by the Japanese Ministry of the Environment as an Environmental Counselor.

**Dr Koichi Tagomori**

*Director, National Institute of Advanced Industrial Science and Technology*



**アジア都市連携による環境技術専門家会議2009**

～アジア太平洋地域における持続可能な環境開発のための技術協力を考える～

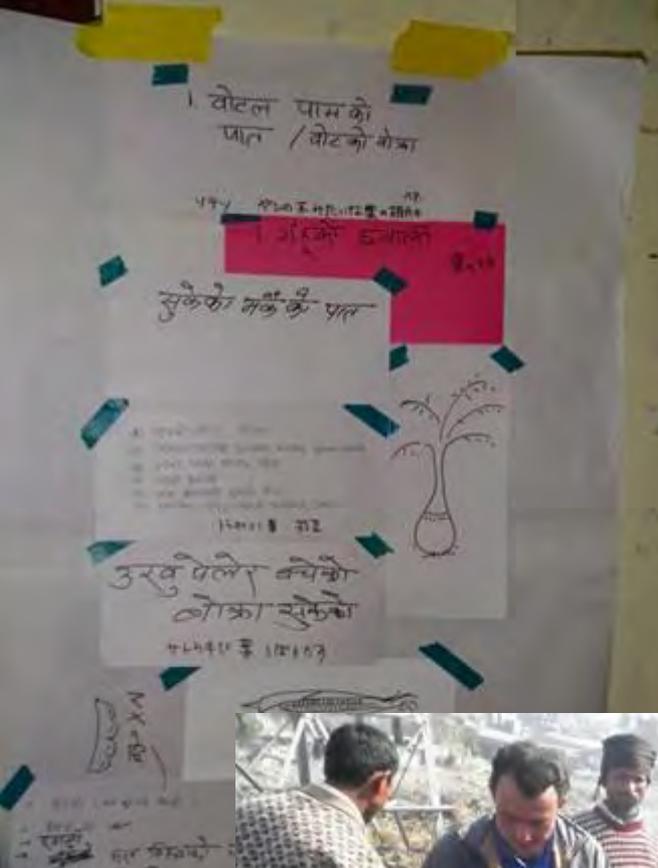




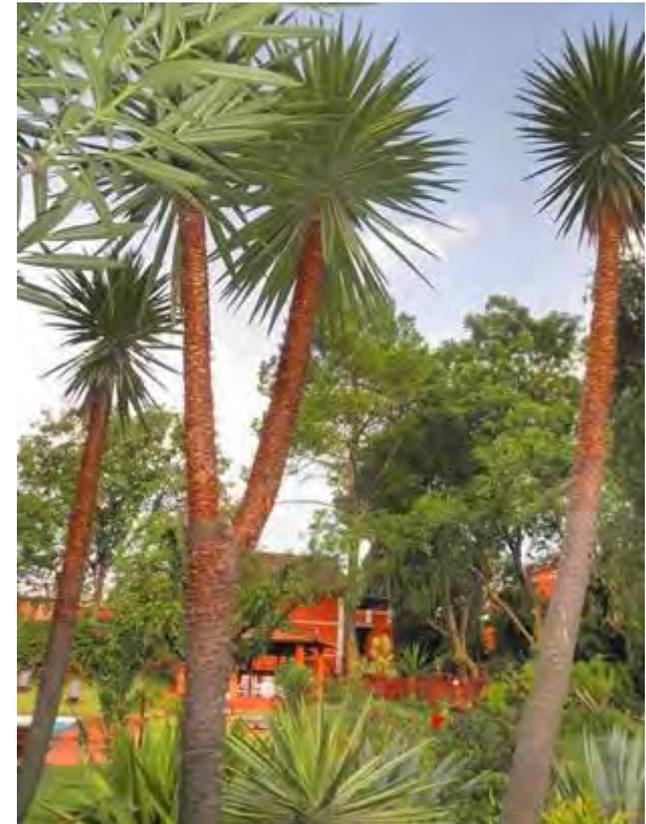
# Leaders Training Program (transfer of know-how) in Nepal

## 4 days lecture and practice seminar





Using locally available materials



People come to learn the method of resource recycling from 30 countries every year



## Asia 3R Promotion Civic Forum in Vietnam (2013)

### Kitchen Waste Compost / Resource Circulation for Asia

Introduced the circulation-based community for saving-resource/energy.

In this circulation, making compost is the key. The NPO bears production of compost and instruction of vegetable garden using non agrochemicals.

Moreover, in community based resource circulation, it is important to foster experts who can produce compost and chemical-free organic vegetables in order to achieve a low cost and sustainable society.

Explained the benefit of compost and the relationship with people and the role of NPO.

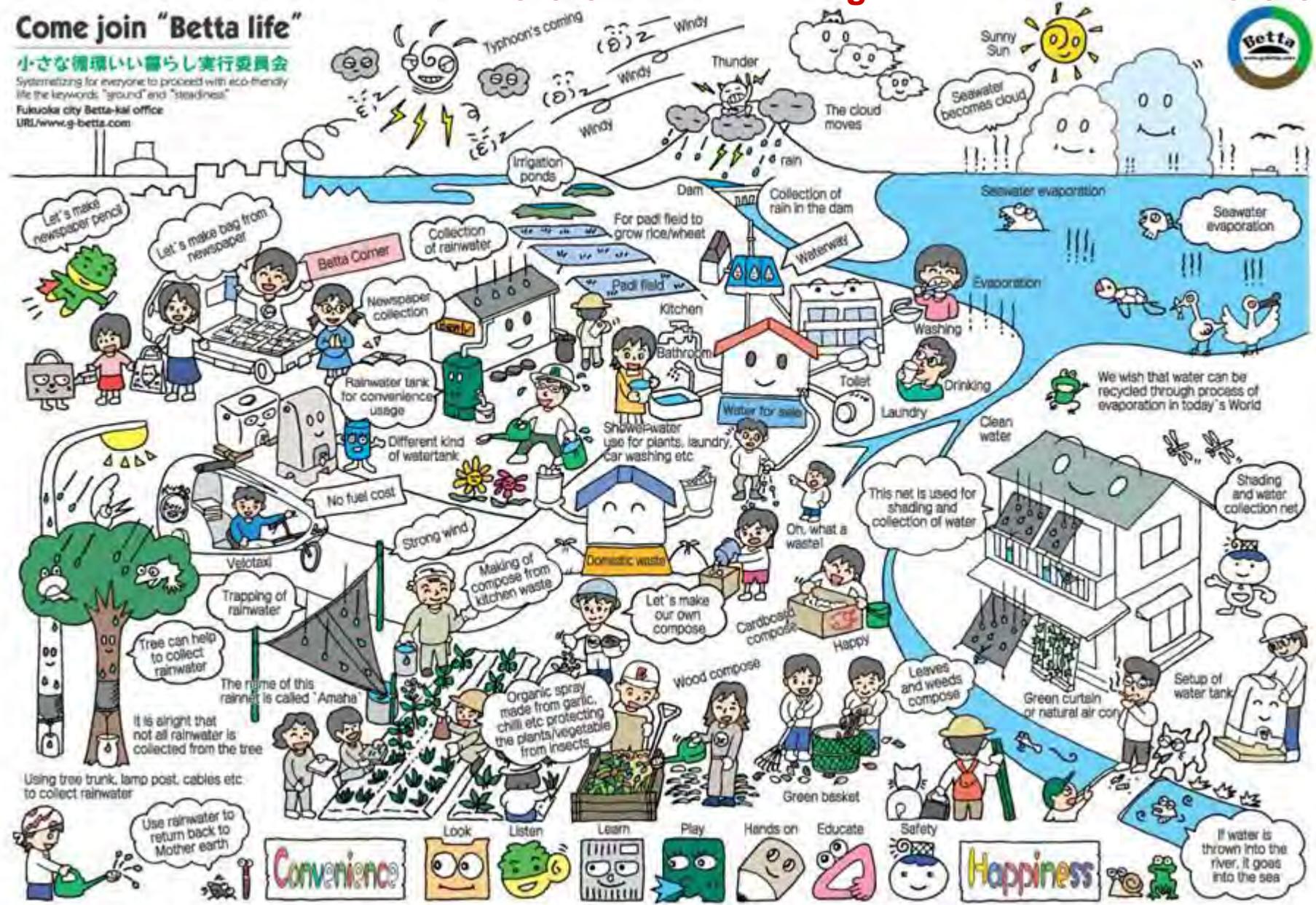
Explained the concrete technique and mechanism and tips that people can easily try.

**We found massive needs in the personnel training of Cardboard Box Compost. We are planning next year.**



## Come join "Betta life"

小さな循環いい暮らし実行委員会  
Systemizing for everyone to proceed with eco-friendly life the keywords: "ground" and "steadiness"  
Fukuoka city Betta-kai office  
URL/www.g-betta.com





# Cardboard Composting in Nepal

some experiences



**Padma Sunder Joshi**

Habitat Programme Manager, UN-Habitat  
NEPAL

- Introduced in 2010 with the support of UN-Habitat



- Promoted in Kathmandu and in Baglung Municipality
- Popular among urban agriculture practitioners



## Overview

- Bin composting was promoted by municipalities in Nepal
- The limitation of bin composting is smell and insects
- The technical limitation is not attaining adequate heat to destroy pathogens



**.... the conventional bin composting**

# The beauty of Cardboard Composting is

- It is easy to do
- It is economic
- It is less time consuming
- It keeps the insects out
- It provides more balanced manure



## .....Cardboard Composting



.....Some practices in Nepal



# .....Some practices in Nepal



## ROOFTOP FARMING WIN-WIN APPROACH TO PROMOTE URBAN AGRICULTURE

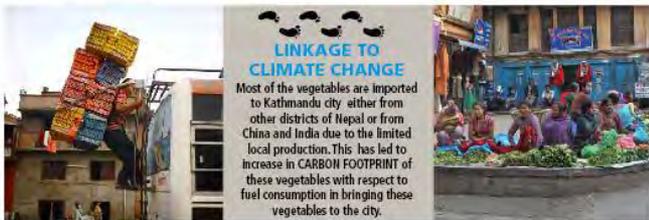
### LINKAGE TO PUBLIC HEALTH

Products from rooftop are Healthy since NO PESTICIDES are used



### LINKAGE TO CLIMATE CHANGE

Most of the vegetables are imported to Kathmandu city either from other districts of Nepal or from China and India due to the limited local production. This has led to increase in CARBON FOOTPRINT of these vegetables with respect to fuel consumption in bringing these vegetables to the city.



A STEP TOWARDS SUSTAINABLE FUTURE



RUAF Foundation

UN HABITAT  
FOR A BETTER URBAN FUTURE



Environment and Public Health Organization (ENPHO) • 110/25 Aadarsha Marg, New Baneshwor  
G.P.O. Box 4102, Kathmandu, Nepal • Tel: +977-1-4466641/4493188 • Fax: +977-1-4491376  
Email: enpho@enpho.org • Website: www.enpho.org



UN-Habitat is promoting urban agriculture in Kathmandu

Cardboard Composting is part of the training

More than 500 families are doing cardboard composting

# ..... now it is demand-driven



**Thank you**