L.E.T.S. Lebanon



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FEATURE STORY

COMPOSTING ON A VILLAGE SCALE

COMPOSTING IS CONTAGIOUS

Since the first **Permaculture Introductory Workshop** in Lebanon was held in July 2013 in the village of Saidoun (Jezzine caza), the **Saidoun Agriculture Cooperative** has been encouraging villagers to adopt sustainable practices. The most popular idea to date is undoubtedly **Composting**.

Like many rural communities, Saidoun suffers from poor waste disposal infrastructure and practices. With composting, villagers can actually benefit from their food waste and make their own compost to use in their gardens, instead of dumping it in the municipality bins to await pickup (not knowing where the waste ends up). They also reduce the amount of garbage produced per household, so there's a double advantage.

2 villagers in particular have become passionate advocates of composting, and have created a buzz around them by calling for a municipal compost center or a biogas facility (see Page 3).



EGGS IN EXCHANGE FOR FOOD WASTE

On the other hand, the cooperative is promoting the idea of **collective chicken coops** as another way to recycle food scraps. The idea is for people to send their organic waste to a neighbor who owns a chicken coop. The waste would be used as chicken feed and, in exchange for it, the "contributors" would get fresh eggs.

The project is still in its experimental stage. 5 houses have already adopted this practice. However due to the sudden change in their diet, the chickens seem to be laying fewer eggs. The next couple of weeks will give a clearer idea of how this project is progressing.

Shared by Rita Khawand

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LET'S FOCUS

GETTING STARTED WITH COMPOSTING

The first time I heard the word "compost" was back in Bristol (UK) in 2006 where I lived for 3 months with 2 permaculturists (it was also the first time I heard about "permaculture"). In addition to sorting their garbage - something I had never done before - my friends put their food scraps in their garden so they could transform into compost - an organic matter that looks like soil, is very nutritive to plants and has a nice smell.

When I returned to Lebanon, I encouraged my family to start sorting part of our garbage: plastic and paper. Amazingly, my mother learned how to do this in no time at all - at the age of 70! That made me doubt people who claimed sorting was a difficult habit to adopt in my country.

However, since we lived in an apartment (in Awkar, Mount Lebanon) with no proper garden, it wasn't possible to think of recycling our food waste. It wasn't until I started spending more time in my native village of Saidoun in Jezzine that I decided to start the composting adventure. I collected food waste from my parents' house and took it to the village where my friend had built me a compost bin from repurposed wood pallets.

And so my journey with compost began. Back in July 2013, we hosted the first Permaculture Introductory Workshop in Lebanon and we learned firsthand about the theoretical approach to composting. I remember one line that one of the instructors, Pepo Dib, used then: The way to learn composting is to start composting. I found that this is absolutely true.



I put all my food waste in the compost bin (vegetable scraps, fruit skins, cooked pasta and rice, tea bags, bread, coffee grounds, etc.), in addition to some paper, napkins and cardboard (especially those that got in touch with food and cannot be recycled, such as pizza boxes). I started soaking paper with water prior to disposal after I noticed that it was decomposing too slowly. But even with soaking and shredding some types of cardboard still take too long to decompose, such as coffee cups (I guess because they are "waxed"). I also tried adding cooking oil but noticed that it wasn't decomposing well, then I read that it should be poured over paper or napkins before going into the bin, but I haven't tried it yet.

In most of the online information about compost, it's written that one shouldn't include meat and dairy products with organic waste, mainly because they attract rodents and other animals. I don't eat a lot of meat but I've added cheese and yogurt several times to my compost pile without having any problems. I haven't had any animals messing with the pile. Once I saw a strange type of insects in huge numbers inside the compost pile and was worried at first. Then I discovered they were the larvae of the soldier fly, the huge mosquito-like insect which we see in summer but that doesn't bite. It turns out this larvae is an avid eater of organic matter.

As for garden waste, I add green tree leaves and dried weeds, but I make sure there aren't any weeds with seeds in them, because "cold compost" - the type I have - doesn't generate enough heat to kill the seeds, and they might re-sprout when I put the compost in the earth.

CHEMISTRY: WATER AND AIR ARE INDISPENSIBLE - - - - - - - -

Composting relies on the action of air to break down waste (aerobic digestion). The "bin" I have lets in a lot of air from the sides, and is partly covered to avoid long exposure to sun or rain. I also turn the pile every 2-3 weeks when I notice a slight ammonia smell (this means it lacks air).

Ideally, compost should be humid, but not wet. I add water to my compost pile from time to time (the water I use to rinse my kitchen scraps container) but it always seems to be too dry.

MY FIRST BATCH OF COMPOST -----

I sifted my pile for the first time in September (6 months after starting it). I was glad to get a bucketful of compost which I used to plant potatoes. It's amazing to realize how all those different food scraps turn into a homogeneous and nice smelling dark matter thanks to the efforts of billions of hardworking micro -organisms.

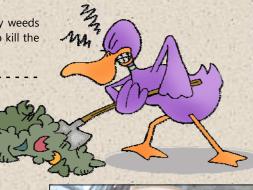
Shared by Rita Khawand

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LET'S FOCUS

GETTING STARTED WITH COMPOSTING

Continued from Page 2

MAKE YOUR OWN COMPOST

When you make compost, you keep your plants healthy and reduce the amount of organic waste that would otherwise go into landfills.

WHAT YOU WILL NEED:

1. Green materials (Nitrogen)

Grass clippings, leaves, fruit and vegetable scraps, used tea bags, coffee grounds.

2. Brown materials (Carbon)

Dry leaves, branches and twigs, cotton/wool rags, nut shells, paper/cardboard shreds

3. Water, Air

CHECKLIST:

- ✓ Combine equal amounts of Brown and Green materials
- ✓ Keep your compost pile moist (not too dry, not too wet)
- ✓ Turn your compost pile from time to time

Shared by Rita Khawand



LET'S SHARE OUR NEWS

BIOGAS FOR RURAL COMMUNITIES

Since July 2013, two units for the production of **biogas** have been operational in the **Bekaa** and **South Lebanon**.

Biogas is produced by treating animal, vegetable and human waste with special composting facilities called 'biogas production units'. The organic matter decomposes anaerobically (without oxygen). It is treated in special units that eliminate microbes and seeds to produce an organic fuel. This can be a great and low-cost energy source for rural communities.



The benefits don't end here. The residual decomposed organic matter can be used as an organic fertilizer free of any harmful organisms. Treating waste in biogas production units could be the solution to the lack of adequate waste treatment or disposal systems in remote areas.

The units were built with the help of the Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD). The center trained engineers and veterinarians from the Ministry of Agriculture on the use of the facilities.

Reported by Alexis Baghdadi. Source: www.acsad.org

▶ COMMENTARY

By Rita Khawand

Incinerators are NOT a solution!

Incinerators generate toxins, are inefficient, don't create a lot of job opportunities and cause competition over waste. For example, Sweden, which is perceived as a very advanced country in environmental matters, is forced to import waste from neighboring countries to feed its incinerators (used to supply homes with heating).

Organic waste is a valuable resource ONLY if sorted at the source

Organic waste is a valuable resource. If it ends up in landfills, it generates methane and releases it into the atmosphere. Methane has more than 21 times the greenhouse gas potential of CO₂. Sorting organic waste at the source has several benefits:

- It produces **energy** through anaerobic digestion *and* **compost** through aerobic digestion
- Still edible food can be sent to certain associations https://www.facebook.com/FoodBlessed
- Clean food packaging (cardboard, paper) can be sent to recycling plants
- Dirty packaging can be added to compost as a source of carbon

GREEN RESOURCES

COMPOSTORY - LEARNING WEBSITE



Free online teaching resource for collecting, sorting and composting organic matter.

http://www.compostory.org/

DIPLY - DO-IT-YOURSELF INSTRUCTIONS



Crafts, tips and inspiration with step-bystep instructions.

http://www.diply.com/

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LET'S SHARE OUR NEWS

NATURAL BAKING - FOR THE LOVE OF BREAD

Roger Nasr is a self-taught baker (he also taught himself paragliding - but that's another story). For two years, he has been baking his own natural bread and improving the process every time. For now, Roger bakes 1 type of loaf based on what he considers a well-balanced recipe. He bakes on demand mainly, and people reserve their loaf 1 day in advance.

What does it take to make good bread? Basically, it comes down to letting nature work for you.

Making bread is about the process first. The essential recipe has stayed the same for over 6,000 years and it has worked out fine in all that time.

Since I started experimenting with my own bread at home, I have picked up a few firsthand lessons and read a lot on the subject. From discussions with health-conscious friends, I realized we all needed to understand bread more fully:

Slow fermentation is better:

Fermentation can make or break good leavened bread. For the fermentation to work its magic, it needs enough time to allow the enzymes and lactic bacteria in flour to break down the elements found in dough into nutrients the body can process. When I prepare my dough, I use a sourdough starter which I cultivate from whole wheat or rye with water. I add it to my final dough preparation and let it ferment for around 8 hours before baking. Fast-acting commercial yeast has given bread a bad reputation. When combined with intensive mixing, it achieves maturation in less than 30 minutes so the bread is hard to digest and has less aroma and a shorter shelf life.

Kneading and stretching:

The act of repeatedly stretching and folding the dough by hand helps improve its elasticity for a better bread consistency. Now, powerful dough mixers have replaced hand kneading methods. If used carelessly, they risk over oxidizing and bleaching the dough, which causes it to lose flavor and nutrients.

Whole wheat is too extreme:

In the 50s, we mistakenly believed that whiter flour produced cleaner and healthier bread. The race to produce the blondest wheat and the whitest flour involved more and more processing. When we realized that too much processing eliminated a lot of the nutrients from flour, many of us reacted by taking a full 180 degree turn and started using 100 percent whole grain instead. That was our second mistake. Our ancestors had discovered long ago that reducing the content of bran in flour led to bread that had a more enjoyable taste and was easier to digest.

In summary, baking well is a very delicate and time-honored process that requires careful understanding and a deep appreciation before we can introduce any change.

Shared by Roger Nasr





Roger's bakery is located on Adib Nahas Street, next to Sassine Square in Ashrafieh.

He bakes Mondays to Fridays until 7:30 p.m

Drop by or contact him to find out more: Tel: 03-793129

Facebook: https://www.facebook.com/pages/ Roger-Le-Boulanger/255821374561000

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UPCOMING EVENTS

FAIR TRADE LEBANON
NEW STORE OPENING



DECEMBER 6-7, 2013 12:00 p.m. to 7:00 p.m.

Hazmieh, Hourani Center, St. Elie Street, facing Mechitarists school

Tel: +961.5.952153

http://www.fairtradelebanon.org/index.php

THE DEGHRI PARTY (DEGHRI BIKE MESSEN-GERS 3-MONTH ANNIVERSARY)



Dance party, punch, bikes, goodies

Entrance: LBP 20,000 + 1 drink

DECEMBER 7, 2013

AltCity - Mezzanine, Hamra Street

Tel: +961.1.746258

events/1421850704712192/?ref=2&ref_dashboard_filter =calendar

THE OLIVE HARVEST FOOD AND FACTS (TERRA MADRE DAY)



Presentation by Barbara Massaad. Olive and olive oil tasting

DECEMBER 10, 2013 6:00 p.m. to 11:00 p.m. House of Zejd - Ash-

rafieh, Mar Mitr Street

Tel: +961.1.388003 https://www.facebook.com/pages/House-of-ZEJD/ 313151870566

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L.E.T.S. Lebanon

LET'S SHARE OUR NEWS

EXPERIMENTING WITH KOMBUCHA BREWING

Kombucha tea is fermented tea made from green or black tea and a yeast and bacteria culture called the kombucha mushroom (not really a mushroom).

Brewed in China for the past few thousand years, it's becoming more and more popular all around the world as its health benefits (improved digestion and high antioxidant properties) become better known.

Lately, I turned my kitchen into a lab as I brewed my own kombucha tea. I've also been trying to create a kombucha mushroom to use in future preparations.

The procedure to make Kombucha tea is simple yet delicate. The steps are quite straightforward, but it is very important for the water to be properly boiled and the utensils to be clean. You want to avoid having bacteria in your tea, which would affect the growth of the mushroom and risk poisoning you.

Basically, all you need is a big glass jar, water, tea (green or black), sugar, some readymade kombucha (you can find kombucha tea in the **A New Earth** shop in Ashrafieh, next to Dfouni supermarket), and a "Kombucha mother" or SCOBY (a flat pancake-like growth of yeast and bacteria made from kombucha tea - you can ask a friend who already makes kombucha to give you one).

Make 3-4 liters of tea, and add 1 cup of sugar while it's hot. The sugar will be the mush-room's food. Let the tea cool down to room temperature. Put it in a big glass jar, and add a small quantity of ready-made kombucha (around 10% of the total amount of liquid). Seal the jar with a piece of fabric (a clean T-shirt and rubber band works well). Finally, add the SCOBY, and you're done! You'll have to store the jar in a stable, dark, warm place to let the mushroom do its job (or cover it with a thick towel and leave it in a warm place). It needs some heat to grow, and anything over 21-22° Celsius is good!

Check on your brew every few days. After a week or two, you'll see a thick yellowish layer above the liquid (8-9 mm thick). Your komucha mother had a child! Try the Kombucha with a straw, and if you like it, carefully take both mushrooms out (mother and child), and bottle the tea! If you feel like making some more, keep a little tea and 10% of your kombucha mother, and do the whole thing over again! Also, give your child Kombucha to a friend, or start a micro-brewery!

Don't take my word on all that! Do some research, get creative, and enjoy!

Shared by Sari Hawa





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COMPETITIONS

48 GO GREEN - INTERNATIONAL ECO FILM COMPETITION



\$10,000 in cash and prizes, including a trip to Hollywood to show your film.

Deadline to register: DECEMBER 15, 2013

http://www.48gogreen.com/en/save-the-planet-register-for-free.html

SAMIR & CLAUDE ABILLAMA ECO-ENTREPRENEURSHIP AWARD



\$20,000 grant for the best eco-entrepreneurship idea (product, process, service or system)

<u>Deadline for submitting proposals:</u> <u>DECEMBER 30, 2013</u>

http://www.aub.edu.lb/units/natureconservation/programs/eco-entrepreneurship-award/Pages/index.aspx

A THOUGHT TO SHARE ...

"Remember, all of man's happiness is in the little valleys. Tiny little ones. Small enough to call from one side to the other."



-Jean Giono (1913-2008) Blue Boy (Jean le Bleu)

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