

# Will Big Food work in the natural market?

# In this issue



merica has been on a long binge. We've consumed vast quantities of the fruits of mass production. We've grown up with the siren song of *more*, *more* and *more for less*. But now we find ourselves in an economically troubled world where cheap food has taken its toll on our health, the environment is in trouble, and we depend on a continuous stream of globally sourced *stuff* produced by people at the very bottom of the economic food chain.

Nonetheless there is encouraging news. Like Dickens's Ebenezer Scrooge, many of us have been sufficiently scared by the ghost of the future to be glad of the opportunity to set things right.

But there are those who have reaped big profits from supplying our cultural frat party who don't see change in the same positive light. Take, for example, the recent attempt to make a dent in the obesity epidemic by giving our kids more veggies in school lunches that was stymied by a congressional pressure fest, courtesy of the french-fry and frozen-pizza lobby.

Despite some opposition, the natural market continues to grow and brings with it a change in values. It's about people and quality of life. It's about small farms, fresh produce, no GMOs or chemicals, artisanal products and giving back. It's not all about more for less. People are willing to pay more so a farmer can make a decent living.

Now that the natural products business has grown big enough, many factory-economy companies are buying into it. They have acquired respected natural and organic brands for their "brand portfolios."

This begs the question, in the values-driven natural products arena can big corporations credibly play *both* sides of the fence?

How healthy is a cereal that boasts of fiber when part of that fiber comes from corn syrup, the main ingredient is sugar, and it contains no less than five artificial colors? Can we believe the claims of social responsibility of a fast-food giant that offers pizza cheese as a source of calcium to build strong bones?

When idealism gets lip service but in reality is just marketing to the "wellness sector" or healthwashing of an inherently unhealthy product, it trivializes what is a necessary evolution for the health of our population and planet.

In the end, I maintain faith in an educated marketplace. The world I want to live in and that I want for my children and theirs is one of diversity, honesty and opportunity that brings out the best in all of us. What do you think?

Ken Whitman PUBLISHER

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## Luis Pacheco, MD

## Facing the Hispanic Health Crisis

by Anna Soref



When Dr. Luis Pacheco throws a health fair in East L.A., people come. Mainly it's women, but the men come too, joining a long line to see the good doctor. When they finally get their face time, the news is usually bad. The majority are overweight and bordering on diabetic, if they aren't already. For those who lack health insurance (most), it's their only

it's a very fast growing population that is expected to triple by 2050. Sadly, it's a very unhealthy population too, notes Pacheco. "You have a lot of people making bad lifestyle choices—eating very poorly, not getting enough exercise."

The impact of an unhealthy population of this size will be disastrous, predicts Pacheco. "We are going to have out-of-control healthcare costs that will be astronomical. I think most people have no idea how incredibly expensive it will be to care for this population."

The picture of failing health that Pacheco paints is bleak. "When you are obese, you are prediabetic or diabetic until proven otherwise. So with the obesity epidemic we

We are going to have out-of-control **healthcare** costs that will be **astronomical**. I think most people have no idea how incredibly **expensive** it will be to **care** for this population.

chance to see a physician. Plus, everyone knows Dr. P. is the best.

With his Latin good looks and trim physique, Luis Pacheco is somewhat of a celebrity doctor in the Hispanic community; although for a University of Southern California-trained MD, dedicating his work to serve the underserved, perhaps *hero* would be a more apt term.

When he's not seeing patients, Pacheco is busy sounding the alarm. The emergency is a health crisis in the Hispanic community— "a tidal wave that's coming," he says.

#### A Booming Problem

There are 50 million Hispanics in the United States. That's more people than live in Canada. It's more than the population of Spain. And

have the diabesity problem, and now we are seeing it in adolescents. Instead of patients being diagnosed in their late 40s and 50s, now they are diagnosed at 14 and 15.

"Imagine an enormous population of 30- to 40-year-olds with major medical problems due to uncontrolled diabetes and obesity, like blindness, amputations, foot ulcers, dialysis, renal failure, and then of course heart disease and strokes. This is going to be a serious problem because these will be 30-year-olds instead of 70- and 80-year-olds. So unless we do something about it, there will be a lot of people with long-term chronic illness for 20 to 30 years.

"Not to mention a tremendous cost in terms of quality of life for these people," Pacheco continues. "It will be hard for them to enter the workforce, hard for them to provide for









We know that if you lack **financial health**, your chances of having poor physical and emotional health are much higher. These are **hard-working people**, but if they don't have **jobs**, then it's a **downward spiral**: What's the cheapest way to feed yourself? **Fast food**. So you start taking the easy way out.

their families, and hard for them to enjoy their lives; and then the financial impact could really cripple economies on a global scale."

#### **Beyond Tortillas and Lard**

What makes the Hispanic community so vulnerable to obesity? It's part genetics and part environment, Pacheco explains. "Unfortunately for many Hispanics, a chubby baby is regarded as a healthy baby. Well, we know now that a chubby baby predisposes it to diabetes later in life," he says.

Low awareness of nutrition presides among Hispanics, and when there is awareness, motivation is often lacking. "The sad reality is that many people, Hispanics and non-Hispanics alike, are probably more aware of what the specials are at the big fast-food chains than they are of healthy eating," Pacheco remarks.

Rampant unemployment also drives poor nutrition. "We know that if you lack financial health, your chances of having poor physical and emotional health are much higher. These are hard-working people, but if they don't have jobs, then it's a downward spiral: What's the cheapest way to feed yourself? Fast food. So you start taking the easy way out."

The spiral goes something like this, according to Pacheco: Frustrations come from lack of employment, which means lack of financial stability and access to healthy foods and health insurance, followed by lack of culturally relevant healthy and affordable products that are designed for the Hispanic and Spanish-speaking community.

Add to this a growing characteristic in the community that Pacheco finds very troubling: the "victim mentality." "I'm hearing more of 'It's someone else's fault that I'm obese.' Of course there are a number of reasons for someone to be obese, but I think that once we start becoming victims, we give up. And then the problem is only going to get worse. So one of the messages that I am trying to get out there is that we need to be strong and determined, not be victims."

#### A Financial Issue

With their \$1 trillion in spending power, why are manufacturers reluctant to market healthy products to the Hispanic community? "It's a financial issue," Pacheco says. "If you are a huge corporation, why should you spend a lot of time on 15–20 percent of the population? It's the old 80/20 rule—you should be spending your company's time and resources on the 80 percent and not worry too much about the 20 percent.

"But we know now that the 15-20 percent is growing and beginning to have significant

spending power, and people are starting to take notice. In the past, there was a belief that a lot of Hispanics were poor and couldn't afford to buy these products. But now the numbers don't lie. Another big challenge is that companies don't know where to start or even what products to introduce. I've seen some attempts, but more effort must be put forward so that the products really resonate. It's a lot of work; it can be challenging; and therefore, for many companies, it's easier to go after the rest of the market instead."

Pacheco makes sure his speaking schedule includes business venues where he can reach





During childhood, Pacheco spoke mostly Spanish at home. "I lived in Peru for a few years as a child. That was a great experience. I've had exposure to many different Hispanic cultures. Growing up on the East Coast, I spent a lot of time with Puerto Ricans and Dominicans." He also had the opportunity to learn about European culture, having studied in France for a year as a teenager.

Pacheco's exposure to Latin communities served him well when doing his residency at USC in Los Angeles, where a seed was planted that would shape his career. "In my residency training we took care of a large number of underserved areas of Latinos and African Americans. I got a very close look at what was destroying those communities."

Pacheco knew then that he wanted to help

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natural products manufacturers, marketers and investors and explain that there's money to be made in the Hispanic community while providing healthier food and supplement options.

"The natural products industry is the perfect area for products that serve the Hispanic population," Pacheco told a packed room of the leading natural food and supplement manufacturers at last year's *Nutrition Business Journal* Summit in California. "Hispanics believe in botanicals and are wary of drugs and the potential side effects," he informed the audience.

#### More of a Doer

Immersed daily in this challenging environment, how does Pacheco stay motivated? "I've never really thought about it; it's never really been a consideration." A rather surprising response from a man who hadn't planned on working in underserved populations until his residency.

Pacheco was raised on the Upper West Side of New York City by a mother who had departed her native Peru to study on a scholarship at Columbia. His father left when Pacheco was six months old.

"My mother always stressed education; always said stand up straight and be proud of who you are, you can do whatever you want to do—all those clichés, most of which we know are true if you follow through on them."

There was never any question that he would be a doctor. "I was groomed to be a doctor. There are baby pictures of me with the kids' doctor's kit and stethoscope."

underserved populations—but through doctoring, not sitting in meetings. "I was never really politically active in college or residency. I always thought that my time was better spent doing something, rather than sitting in a bunch of meetings merely talking about problems instead of focusing on solutions. I know some organizations do a great job, but I am more of a doer than just a talker."

#### Plan of Action

Hundreds of health fairs and Spanishlanguage radio and television shows later, Pacheco is involved in plenty of doing. Although he's often the bearer of bad health news, his diagnosis is always tempered with practical advice. "I tell patients that they don't have to go on a fancy diet, and I give them

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practical tips instead: 'Do you drink a lot of soda? Oh, you do. Well, simply cut out one soda per day and you will lose 10 pounds in a year without dieting. You like tortillas? Eat one less tortilla a day and you just lost another 10 pounds.'"

Currently Pacheco is gathering resources and support for a Spanish-language TV show that would be a combination of the Dr. Phil, Dr. Oz and Dr. Drew shows, seasoned with a Hispanic flavor. "From going to the health fairs I know that the need and desire for more information is there, but Hispanics don't have anywhere or anyone to turn to. It would be a whole new concept to do a wellness show in Spanish. We want it to be educational and entertaining, with a goal of making people feel good about wellness and inspired to get more involved in their lifestyle choices."

Pacheco's vision to turn around the Hispanic community's health crisis goes beyond health fairs and television, however. "Someone approached me recently and said I should be the Surgeon General, and I thought, 'You're right, I should."

Whether it's the result of his direction from a Washington office or not, Pacheco would like to see a more concerted government effort to help minorities embrace wellness.

"It's not that the government isn't spending hundreds of millions of dollars, but where is that money going? There are no concerted programs making a real difference in the Hispanic situation," he says.

The first step in reversing the obesity trend is with the kids, according to Pacheco. "We are educating adults, hoping they will change their behavior; it's going to be hard

What happened to home economics classes?

Let's bring them back and teach kids how to cook, eat and live in a healthy way; this is fundamental stuff.

and take a long time. The kids we can reach right away."

An excellent place to reach children is at school, including preschool, Pacheco advises. "Obesity and wellness campaigns have to start with the very young and via programs in schools that kids can relate to. We have classes in history and math, but we don't have classes in lifestyle. What happened to home economics classes? Let's bring them back and teach kids how to cook, eat and live in a healthy way; this is fundamental stuff."

These classes could result in children bringing home the wellness message, he says. "If the kids are saying, 'Mom, use olive oil instead of lard,' then the parents get the message peripherally."

And get those kids in physical education five days a week, Pacheco asserts. "Don't tell me you don't have teachers or facilities; you throw a stick or a ball out there and kids will figure out ways to play. When you see schools cutting back PE classes, it makes no sense at all: it makes me insane."

Another area he believes holds potential to change bad health habits is prenatal care. "My experience over the past 20 years is that the vast majority of pregnant women I've seen will do almost anything to take care of themselves to have a healthier baby. But after the baby is born, it's back to the old habits. So I think that prenatal period is an extremely powerful opportunity to intervene and educate and inform them."

#### **Determined Optimist**

To help bring about awareness and alter the path of the coming Hispanic health-crisis tidal wave, Pacheco urges individuals and companies to become as well informed as possible about the Hispanic culture and to be active on school boards, doing things like demanding PE five days a week, and also to contact politicians. "Even if your family isn't affected by obesity, it's everyone's problem," he says.

In the face of alarming statistics and daily face time with a community on the brink of health collapse, Pacheco is undaunted. "I don't feel any frustration; we can overcome this situation. It's not going to happen overnight—it will take a generation—but we can do it. I guess I'm that kind of person: the glass is always half full. I just never give up; it's very straightforward with me. Churchill said it best: 'Never, ever, ever, ever, give up."

For further information on preventing obesity among Latino children, visit www.salud-america.org; and for more on the childhood obesity epidemic, see www.reversechildhoodobesity.org.



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### **Gotham Greens**

# Sustainable Farming in the Big Apple

by Bruce Boyers



Our system of factory agriculture is exacting a great toll on our planet: 40 percent of the land and 70 percent of the fresh water on Earth is devoted to the growing of food, which, in the process, creates some 30 percent of greenhouse gases. Compounding these issues is the fact that commercial produce is often transported thousands or even tens of thousands of miles to its point of sale, consuming tons of fossil fuel. It is evident that our current agricultural model is a failed experiment in search of a more sustainable solution.

In an effort to bring needed fresh produce closer to home with far greater sustainability, a movement in urban agriculture is rapidly gaining momentum. New York City, having such a large and diverse population, is a metropolis ripe for green urban agriculture and is now home to an innovative commercial operation called Gotham Greens.

#### Inspiration

"The inspiration for Gotham Greens was seeing an increasing concern about the way food is grown," Viraj Puri, co-founder of Gotham Greens, told Organic Connections. "It's so resource intensive in terms of land use, water use, fertilizer runoff, pesticide runoff, pesticide use-things of this nature, including long-distance food transport. People are also increasingly worried about public health concerns over food safety."

Gotham Greens has now gone into full production and is providing much-needed locally and sustainably grown produce for the greater New York City area. "My partners and I had a vision for a local farm operation here in New York City that could provide New Yorkers-which would include restaurants, retailers and consumers-with premium quality, fresh, nutritious culinary herbs and greens, salad greens and lettuces," Puri said. "They would be grown year round so that we could reliably and consistently supply our customers with local produce. Obviously our climate in New York doesn't support year-round agriculture of a lot of these crops, so we thought we would try to do something in a greenhouse. A greenhouse climate allows you to potentially grow year round, at the same time protecting crops against extreme or detrimental weather events."

Gotham Greens was founded in 2008 by Puri and Eric Haley; then in 2009 Jennifer Nelkin joined as a partner to head all

India, and in Malawi, Africa, focusing on green building, renewable energy and environmental design. Haley, who is currently employed by a Manhattan-based investment bank and private equity fund, also brought business acumen to the operation. The farm know-how comes from Nelkin, who cultivated her expertise in greenhouse systems and management at the University of Arizona. In addition to greenhouse system design, her skillset includes plant nutrition and crop and pest management. She has managed greenhouses in far more extreme circumstances than New York-namely two different locations in Antarctica, providing fresh vegetables for US research scientists.

#### House of Greens

The Gotham Greens urban farm is located within a 15,000-square-foot state-of-the-art climate-controlled greenhouse atop the roof of a two-story building in the Greenpoint

# My partners and I had a vision for a local farm operation here in New York City that could provide New Yorkers—which would include restaurants, retailers and consumers—with premium quality, fresh, nutritious culinary herbs and greens, salad greens and lettuces.

greenhouse operations. Puri himself had previously developed and managed start-up enterprises in New York City, in Ladakh,



neighborhood of Brooklyn, New York. Beginning with leafy greens, including several lettuce varieties and a broadening assortment of culinary herbs, Gotham Greens is intent on continuing to expand its range of crops, with an immediate production goal of 100 tons annually.

The choice of a rooftop was made quite deliberately. "New York City obviously doesn't have a lot of arable or available land, so it seemed to us that one underutilized resource was rooftops," said Puri. "You're seeing more and more innovative uses of the rooftops now in urban areas nationwide."

Getting a rooftop greenhouse up and operational-especially one of this size and scope-was no mean feat. "It was extremely challenging," Puri recalled. "I would say the biggest challenge was just having any real path to follow. There's not a lot of precedent for what we're doing.

"The first thing was finding a building owner who wouldn't mind us building a greenhouse on his or her roof. We also had to find a building that met all the construction criteria, both structurally and for the obtaining of utilities. In addition there had to be access, and the evaluation of how we would get stuff up and how we would get stuff down. On top of that we had to make sure the plan would meet all zoning and building codes."

The Gotham Greens operation, as one might imagine, represents an enormous saving in resource usage. "We employ a recirculating hydroponic technique that actually

Even though we are not in an area that is susceptible to drought, we still think that it's a great demonstration of a technology that is very water efficient." The hydroponic growing environment is sterile as well, which eliminates the risk of pathogens-particularly important in light of the increase in foodborne illnesses, such as E. coli and salmonella, from fresh vegetables.

#### **Planned Economies**

Due to the hydroponic growing methods, the facility is also extremely economical with space. "We use about twenty times less land in terms of what we produce per unit area as compared to conventional agriculture," Puri continued. "The equivalent of a conventional farm for the crops we produce would be six acres."

Puri and his partners have seen to the frugal use of energy too. "We have 55 kilowatts

# **Bok Choy** notes. Also known as pec choi. Chinese chard or spoor cobbogs, these succeivent white stems and dark green leaves have a mility or flavor with a hint of an estand. Grown in China since the 18th century, Bok Choy Isrich is witcomin A and C. It's related to both cobbage and the common turnip.

nitrogen, magnesium and potassium, along with micronutrients like selenium. In controlling pests, we mostly rely on beneficial insects; there's a whole program in integrated pest management for which a fair bit of monitoring goes on. If we do find a pest in here, we will introduce its natural predatorfor instance, we have ladybugs and lacewings to control aphids."

#### It's in the Taste

Despite all the technological advances displayed in Gotham Greens, the top priority is taste. "Flavor is our number one priority here at Gotham Greens," Puri remarked. We want to be known more for the flavor of our products than the fact that they're grown in New York in a greenhouse on a rooftop, or any of that. First and foremost we want to win taste tests, which we've successfully done."

Like many others concentrating on great flavor, Puri and his team have found that truly caring for the plants will result in the superiority they seek. "The biggest thing in obtaining that flavor is really taking care of our crops-making sure they have ideal growing conditions in climate, humidity, temperature, and so forth. We're also making sure they're getting all the nutrients that they need, along with the right amount of irrigation, the right amount of dissolved oxygen. The foremost belief is that healthy plants are going to make for tastier plants.

"And then because we are so close to our customers, we never have to harvest anything before it's completely ready. Many

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goes back and captures all irrigation for reuse," Puri explained. "It's the most water-efficient form of agriculture in the world. We use ten times less water than conventional agriculture.



in solar panels that produce electricity to help meet the electrical needs of the facility," said Puri. "Along with that, we've spent a lot of effort here to design our facilities to be as energy efficient as possible. We've installed increased insulation in many areas; the glazing material that we selected helps insulate the greenhouse; and we've deployed heat curtains and heat blankets in the winter to reduce space in the greenhouse that needs to be conditioned." Additionally, a sophisticated computer control system ensures that climate-control equipment operates efficiently to reduce resource consumption.

Perhaps the most significant saving in terms of resources is that of fossil fuels, as the distance from farm to consumer is considerably shorter. "Of course, we sharply reduce the transportation of our product and the associated carbon emissions that are caused because of that," Puri added.

All nutrition and pest control is done naturally and sustainably, which was also one of the goals for Gotham Greens. "We utilize mineral salts that we dissolve in the water," Puri said. "These contain minerals such as



conventionally grown crops have to be refrigerated and transported long distances, so they are picked early and then artificially ripened. We don't have to do anything like that; we can harvest crops when they are at their optimal freshness, size, flavor, profile and color. We can harvest any item in the morning and have it to a supermarket or a restaurant in the afternoon."

In addition to supplying locally grown produce, Gotham Greens contributes to the local economy by providing badly needed jobs. All

staff are residents from the nearby community. As production expands, they also plan to offer their products to more local areas that have limited access to fresh produce.

#### They're Buying It

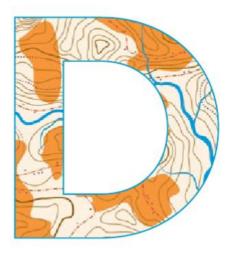
In their first season, response to the availability of such crops has been outstanding. "We're already supplying many of the supermarkets across the city, like Whole Foods Market, FreshDirect, D'Agostino, Union

Market, and a handful of restaurants," Puri reported. "Our products are selling very well, and we're having to turn customers away. We're going to continue adding to our variety of crops, and we're investigating how to build a bigger greenhouse facility where we can grow an even greater diversity of crops for our customers."

For more information on Gotham Greens, visit www.gothamgreens.com.

# The Lappés

# **Big Solutions for a Small Planet**



world in 2000," Frances Moore Lappé told Organic Connections. "We had no idea what we would find, and it was the most pure example I've ever had of just taking the leap. We went to Kenya, Brazil, Bangladesh, India and Western Europe. We wrote about those people most inspiring us, people who were connecting with the land, and also who operated with

a process of honoring human relationships in a way that is empowering to all—creating new decision-making forms that really were inclusive, in which people are holding each other accountable instead of just looking to the market or to the boss or to the CEO.

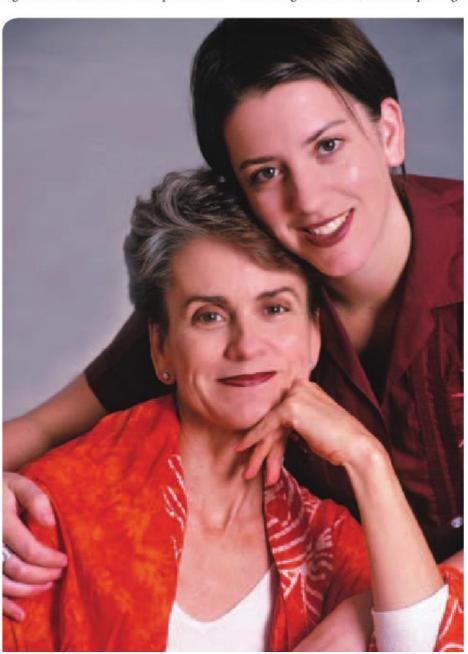
"We wrote about our experiences in a book that changed our lives, called *Hope's Edge*.

Despite the billions of dollars spent by megacorporations in an effort to promote and keep the unsustainable industrial food system in place, there is growing recognition of the need to radically change the way we produce and consume food. A good part of the responsibility for that insight rests squarely on the shoulders of pioneers such as author, speaker and self-described "possibilist" Frances Moore Lappé. Frances sowed the seeds of a food revolution with her best-selling Diet for a Small Planet back in 1971 and has published some 17 books since that time, in addition to having traveled and spoken all over the world. Frances's daughter, Anna Lappé, has become a best-selling author, speaker and food activist in her own right. Anna's most recent book, Diet for a Hot Planet, empowers readers to fight climate change with their dietary choices and advocacy for sustainable food systems.

Together, Frances and Anna founded the Small Planet Institute, a nonprofit organization dedicated to identifying and addressing the root causes of the many ecological, food-related and economic problems of today. Through that organization they are waking people up planetwide to the real possibility of a sustainable future.

#### The Institute

Small Planet Institute was the result of a remarkable mother-daughter odyssey. "It came about after a life-changing journey that my daughter and I took around the



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Anna had her very distinct voice, and there was my distinct voice; but both of us felt that the mother-daughter team was just extra powerful, that we could do more together than we could each do separately. So we joined forces, and are constantly giving each other feedback and supporting one another in every way we can."

Since then, the Small Planet Institute has become a clearinghouse of hope-instilling information from mother, daughter and many other sources. On the site can be found books from both Lappés, interviews, solution-based resources and campaigns, videos, and even recipes.

Inspired by that same journey, the Lappés also started the Small Planet Fund. Frances explained: "We started a fund, administered by RSF Finance, through which we collect money from others and distribute it to democratic social movements around the world-especially those related to food and sustainability. That's been enormously satisfying. They are very small grants, in the \$5,000 category. Every year we have a big event where we raise money, and I think it's more than just a fund. It really has become sort of an annual institution where people from various social movements come to New York City for one evening, and we have a big party with a live auction."

#### Solution-Based Approaches

In her career Anna Lappé has seen a great deal, and today she is more hopeful than ever about practical solutions to turn our planet



storing more carbon in the soil, of reducing reliance on petroleum chemicals, and of cutting out reliance on synthetic fertilizer and all the environmental impacts associated with its use. Such voices as Olivier De Schutter's are saying, 'Look, this isn't just theoretical-this can be done; it is being done."

Anna spoke of specific examples she is seeing of remarkable change around the world to assist in feeding a burgeoning population with purely sustainable solutions. "There is a great study commissioned by the UK government called the Foresight Project on Global Food and Farming Futures. One of the specific studies they commissioned was an analysis of agricultural projects across Africa that meet the standards of being agro-ecological and helping smallholder

"For instance, there are a lot of pilot projects being done in Africa with a particular type of acacia tree, called Faidherbia, which has nitrogen-fixing qualities, building soil fertility where it's planted. It also drops its leaves during the season when the plants around it most need sunlight, so it doesn't compete with other plants for sunlight. The dropped leaves provide great fodder for livestock, at a time when other crops aren't growing. This one tree has all these incredible benefits: helping increase fertility in the soil, helping to increase productivity of crops, and helping create access to food for livestock. A number of projects are training farmers about how to plant it, how to care for it, and how to educate each other about it. That's an example of the kind of innovations we're talking about."

Such changes are lasting, and don't create dependency on foreign corporations. "The other benefit of these types of innovations is that they don't rely on patented seeds that have to be purchased year to year, or the deployment of synthetic fertilizers that leave farmers vulnerable to incredible price volatility," said Anna.

Education is a major factor when it comes to assisting such farmers-for if they aren't made self-sufficient, the assistance won't be of lasting benefit. "The other great development that I've been reading about is one of creating farmer-to-farmer education opportunities," Anna recounted. "This means creating farm schools and ways for farmers to educate each other about these appropriate technologies and about these ecological innovations on the farm."

Frances has also seen many inspiring advancements. "One fantastic example of

We are starting out with a premise of lack-that there are **not enough** goods and there's not enough goodness in us, there's not enough energy, there's not enough food. This makes us distrust, and that's the beginning of the end.

around. "Since I wrote Diet for a Hot Planet, the most encouraging work is being championed by the office of Olivier De Schutter, the UN Special Rapporteur on the Right to Food," Anna told Organic Connections. "These efforts globally are demonstrating the mutual benefits of education for-and promotion of-agri-ecological farming systems to improve the livelihoods of smallholder farmers. These systems include the climate benefits of

farmers. What struck me about the study is that so many of the innovations really have to do with building power in communities, educating farmers themselves with techniques that can be very simple and also use what's known as 'appropriate technology'in other words, they don't require these farmers to be dependent on chemicals or fertilizers bought from companies halfway around the world.

change is in Switzerland and Austria," she said. "Well over 10 percent of agriculture there is organic, and there is real support for this transition. Another story I've been telling recently is about agro-ecology and agro-forestry in Niger. In recent years it has been the poorest country in the world, yet small farmers there have re-greened that area of 121/2 million acres with 200 million flourishing trees. This is in a place in which previously there were just stubs. They had not realized-and now have-that they could integrate cropping with trees that also supply food, along with fodder for their livestock. This process has now provided food security for about 21/2 million people, in an area that had become so barren it was almost a desert."

#### The Changing of the Mind

In addition to finding and forwarding positive practical solutions, Frances has, for many years, been searching for the root of problems in helping individuals to become empowered and work together to create the world we actually want. She has discovered that much of the solution lies in the area between our ears. In her latest book, EcoMind: Changing the Way We Think, to Create the World We

Want, Frances argues that a good deal of what is wrong with the world, from our eroding soil to our eroding democracies, results from ways of thinking that are out of sync with human nature and nature's rhythms.

"EcoMind is really trying to share the core inside that dawned on me 40 years ago," feed us. Paul Ehrlich's book Population Bomb had just exploded, and there was another book by William and Paul Paddock entitled Famine 1975! I sat there and put the numbers together and realized, 'Wait a minute! There's more than enough for all of us to thrive-and worse than that, we are actually creating the

The President's Cancer Panel estimates that 30-40 percent of cancers could have been prevented through food consumption choices. So these questions about what's wrong with our food system are playing themselves out on our bodies, and if not our bodies, then those of our husbands, wives, partners and children. It affects all of us or touches all of us.

Frances related. "It's been 40 years since I wrote Diet for a Small Planet. Back then, a light bulb went on when I was sitting at the Giannini, the UC Berkeley Ag-Library. At the time all the experts were telling us that we had reached the limits of the earth's ability to

scarcity that we say we fear.' So my life has been a journey of exploring that phenomenon in many different ways.

"In EcoMind I am challenging how we think about our environment, how we think about ecology, and really fundamentally identifying the problem in the human mind: the way we've been trained to see scarcity. The whole book is based on the idea that it's not 'seeing is believing,' but 'believing is seeing.' We are starting out with a premise of lack-that there are not enough goods and there's not enough goodness in us, there's not enough energy, there's not enough food. This makes us distrust, and that's the beginning of the end. We distrust ourselves, and we distrust our capacity to come together to make common decisions for the whole, for the good of all."

The book is built around seven widely held environmental messages and related ideas-some of them largely unspoken assumptions-that now shape our culture's responses to the global environmental and poverty crises. In each case, Frances challenges their limiting premises and offers a reframing that she believes can help free us to find our power to create a more livable and sustainable world.

#### Small Planet Institute: **Today and Tomorrow**

Through the Small Planet Institute, Frances and Anna, together and separately, have been taking many measures to bring about badly needed change.



Currently, Anna is involved in a major project to reshape broad thinking about our food system, utilizing the power of the Internet. "In a coalition of thirteen groups, I'm working on a popular education project," Anna said. "This project is to develop a series of short online videos as well as other educational materials and grassroots workshops to help people understand some of the core benefits of sustainable farming. The project is also geared to respond to some of the myths that are still out there about industrial agriculture. The videos are going to examine questions such as, 'Is industrial agriculture the path to feeding the world?' and 'Does industrial agriculture really provide affordable or cheap food?' Ultimately I hope to build a powerful case that shows that the only way we are going to feed the world and feed it well is if we fundamentally rethink how we grow food, and turn away from the industrialized food system.

"And I will argue that one of the best ways to ensure people can feed themselves and their families is through promoting sustainable food and farming systems—regional foods."

Via the institute, Frances has been working schools and organizations to help bring her empowering ideas for change to everyone. "We reach out through any channelradio, the web, and a lot of public speaking and workshops," she said. "I'm developing a workshop now at UC Santa Cruz on Eco-Mind, because changing our mindset is a little bit more than just reading one book. So we're hoping to develop a workshop that we can put on the website eventually, that anybody could take and adapt to a class, group of friends, church group or NGO. EcoMind is already being adopted into several schools, and Anna's book Diet for a Hot Planet is in the curriculum of quite a number of universities, so that's a real excitement for us."

#### To the People

By being on the front lines and talking directly to people, both Frances and Anna have learned much about bringing their positive messages home to the general public.

As is exemplified in the project she is currently engaged in, Anna sees the problem in reaching the public at large as countering the propaganda of industrial agriculture. "I think the average person is primed to be receptive to our messages—unfortunately," she said. "You look at the statistics—one in three kids born in America today will at some point develop diabetes in their lifetime—and the

skyrocketing rates of diet-related illnesses. The President's Cancer Panel estimates that 30–40 percent of cancers could have been prevented through food consumption choices. So these questions about what's wrong with our food system are playing themselves out on our bodies, and if not *our* bodies, then those of our husbands, wives, partners and children. It affects all of us or touches all of us.

"Because of this, when I start talking about problems with our food system, I've never had somebody say, 'What are you talking about? There's no problem!' They do realize there's a problem, but we need to educate people about the source of the problem. The food industry profiting from this unhealthy and environmentally destructive food economy is very savvy about spinning the story, with messages such as, 'Oh, but we produce the safest food, 'We produce the cheapest food,' and 'There's no alternative, because if we tried any other way we would starve the world.' Those are powerful messages, and the extent to which we can work on countering those statements with our own powerful messages is really important."

Frances is constantly inspired by the response to her "possibilist" message. "I'm just thrilled by the reaction so far to EcoMind. When I first wrote the draft of this book and sent it out for reactions, I was terrified that I was really goring sacred cows, that people were going to be angry. And I'm sure that I am making some people angry, but in general the response has been overwhelmingly positive. It's a response that shows that something isn't working in the way that we're approaching these problems, and so they welcome a fresh way. Just two days ago I did my first college class that has been reading the book. The students there were saying exactly what I was hoping to hear, which was, 'Until I read your book, I felt like I had to browbeat my friends and make them guilty. Now I realize I can just invite them into this most exciting thing that I'm doing with my life. It totally changed how I approach and think about it.' So that was a huge reward for me."

While our planetary population wrestles with one crisis after another, the Small Planet Institute strives to illuminate a path to a future that is both certain and bright.

For more information, visit www.smallplanet.org.



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