

The Oil Drum: Campfire

Discussions about Energy and Our Future

Food-backed Local Money

Posted by [Jason Bradford](#) on March 4, 2009 - 7:24pm in [The Oil Drum: Campfire](#)

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I thought this evening's Campfire post might connect well to [Gail's article this morning](#). If the financial system is at a risk of collapse, and if so many of our basic goods depend on the financial system, then what, if anything can we do to be more resilient to economic shocks? Below the fold is a description of a project I am working on that may provide some answers.

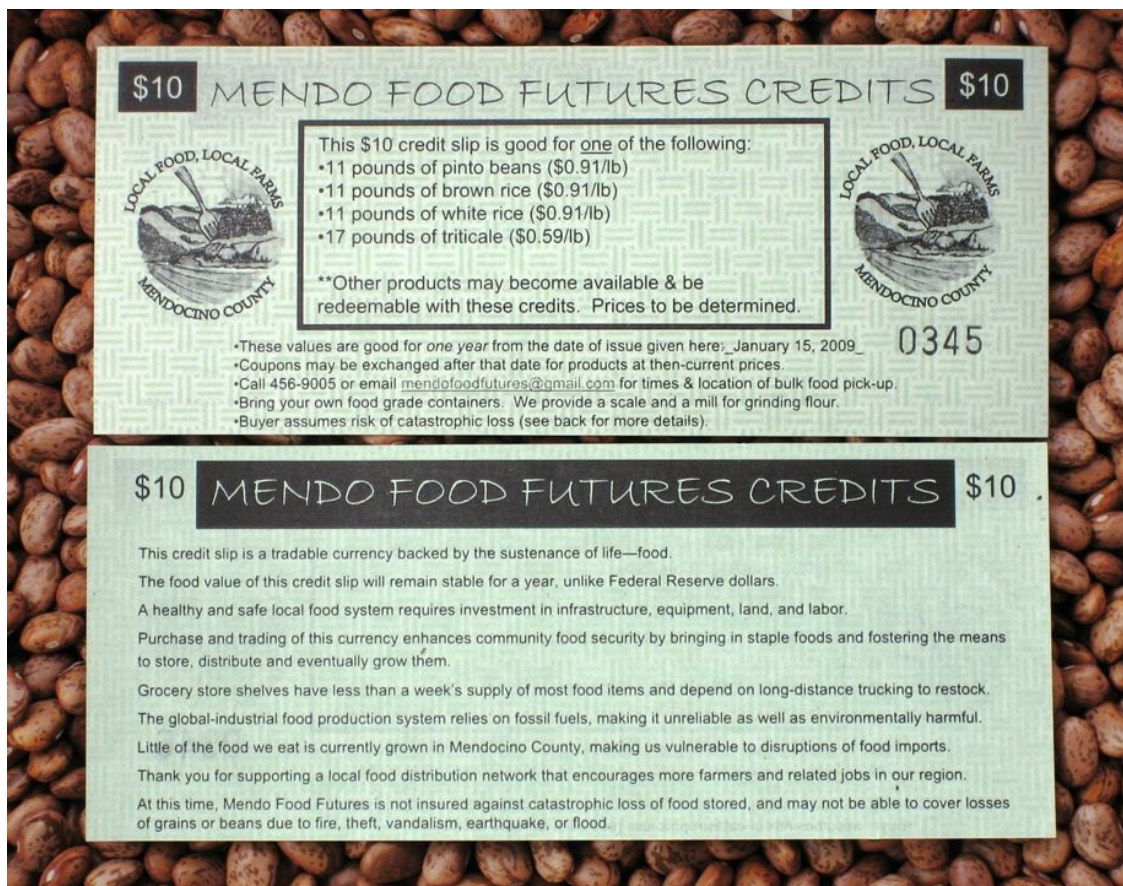


Image 1. Front and back sides of a Mendo Credits slip. Our first printing of Mendo Credits was for 600 notes sold at \$10 each. Proceeds from the sale of Mendo Credits allows us to purchase 8000 pounds of grains and dry beans. Mendo Credits are 100% backed by specific quantities of pinto beans, triticale, and white and brown rice.

As a kid did you ever fantasize about Monopoly game money becoming real? I know I did. Perhaps that's why I left the printer shop the other day with a sense of bemusement. I had just designed and printed \$6000 of money called Mendo Credits. I felt confident that people would accept it, and I also proudly considered that Ben Bernanke doesn't make money as good as this.

Now before you call the Treasury Department to report me, listen to my story. It may sound funny, but the reality of money is deadly serious. This is perfectly legal and I want you to play copy cat.

Rethinking Food Security

Most institutions, such as food aid NGOs or the US Department of Agriculture, express concern about food security in terms of the ability for low income people to purchase adequate food. This is a valid way to think of food security. If food prices are high relative to income, or if other compelling expenses such as housing, health care and transportation also require a large portion of income, then securing adequate food on an individual or family level will be problematic. Programs that disperse food to the needy, redistribute income through tax policies, assist with the high costs of non-food expenses, guarantee a living wage, etc. all address distribution inequity and are laudable.

But the question I want to ask is whether they are now sufficient? Two unspoken assumptions underpinning the framing food security narrowly as an “income problem” require rethinking.

The first assumption is that enough food can actually be grown and delivered to wherever it needs to go. A study of the intersection of supply limits to water, energy and topsoil combined with climate change should dispel the notion that food abundance can simply be taken for granted. Over 90% of transportation relies on oil, and extraction of oil appears to be entering a permanent global decline. The fuel cost spike of 2008 severely hampered food distribution in some parts of the world. Cheap transportation, which permits food to be grown thousands of miles from where it is eaten, stored in centralized facilities, and delivered daily to where we live, shouldn't be taken for granted either.

The second assumption is that the money we have now will remain a reliable medium of exchange that enables a smooth flow of production and distribution. Few people realize that most money comes into existence through bank credit that is backed by the borrower's debt and any collateral. Banks don't actually have money to lend, they simply decide who is “credit worthy,” and for how much. After a borrower signs the loan documents the bank creates the corresponding money in electronic accounts, such as a checking account. Credit and debt are therefore “flip sides of a coin.” People receiving bank credit are in debt to banks, but, correspondingly, banks are in debt to people for all the deposits on hand. When too many loans default, banks are at risk of defaulting on their own promise to maintain the savings of depositors. This is why credit dries up as debts go bad: As debts are cancelled through bankruptcy then a corresponding level of credit must disappear also. In the present banking system it is mathematically impossible for all loans to return their principal plus interest without a constant expansion of debt/credit. But a system that depends upon unending growth eventually ends. The actions of the Federal Reserve to re-inflate the reserves of the banking system are a desperate attempt to fix something that is permanently broken. Unfortunately, the systemic problems are deeper than the surface actions currently being taken by the Federal Reserve, The U.S. Treasury and the U.S. Government. When I think of the global financial system nowadays what comes to mind is the "Humpty Dumpty" rhyme. Knowing that the debt-based money system we currently rely on is failing, we created Mendo Credits to function without debt or interest.

Food-Backed Local Currency

The money I had printed was created with all the above-mentioned issues in mind: wide income disparity, lack of practical self-reliance, unsustainable agriculture, resource depletion, climate change, a fragile just-in-time delivery system, a failing money system, and rising unemployment. When I said that “Ben Bernanke doesn’t make money as good as this” I meant that today’s dominant money actually creates or exacerbates those troubles, whereas Mendo Credits can be part of their solution.

Along with several other people, I am working with Patty Bruder and Cyndee Logan of a local non-profit called North Coast Opportunities (NCO). NCO mainly provides social services, such as running preschools, senior support, and managing community gardens. Mendo Credits is a new food-backed local currency project partly funded by a grant from the California Endowment. The overall goals of the project are to improve community health, economic vitality and environmental sustainability through local food system development. For as long as I have known Patty and Cyndee they have been thinking about the importance of system change and practical self-reliance. They’d prefer to develop a community garden where low income families can grow their own food rather than hand out meal money.



Image 2. The farms package our orders in what are called 1-ton totes, which are large bags moved on wooden pallets. For comparison, an entire hopper car load would be about 12 tons. A local business that does nearly daily trucking to the Sacramento Valley currently transports our food to their warehouse space, where it is also kept pest free using rodent traps. The warehouse tends to stay cool, but we will have to worry about insects during the heat of summer. We have a commercial scale and household storage buckets available. From left to right: Cyndee Logan, Mike Adair and Patty Bruder fill and weigh buckets in preparation for a distribution day.

Historically in the United States and elsewhere, local currencies are known to stabilize local

economies when national currencies are troubled, such as bouts of hyper inflation or deflation and joblessness. This works because those accepting local money are also likely to seek out others who accept it too, creating a social dynamic that forms new, local economic associations. As these strengthen, the flow of local money picks up and work can get done even in the face of economic disaster outside the community. Because they can only be spent locally, profits on economic transactions done with a local currency remain in the community and spur more local investment. Local governments, regional business associations, community banks, and worker cooperatives are examples of the kinds of institutions who tend to successfully issue local currency. They have the social capital to be broadly accepted, and the capacity to manage the task of issuing and redeeming money.



Image 3. A great way to spread awareness of the many issues confronting us is by spending Mendo Credits into circulation. The acceptance of money is largely a social phenomenon, and it is too early to say how well Mendo Credits will be recognized as a local currency. On the several occasions where I have tried to so far, I have had no trouble paying individuals using Mendo Credits. For example, the printer of Mendo Credits asked for payment in Mendo Credits. In the example pictured above, my friend Michael Foley opens his wallet to redeem Mendo Credits for food. He is handing over the same bills I paid him for custom tractor work four weeks earlier. Pending sales of rice and beans to a local burrito shop may mean they will begin accepting Mendo Credits for prepared food.

Mendo Credits are backed by a tangible asset. In other words, Mendo Credits are a “reserve currency” as opposed to a “fiat currency” like Federal Reserve dollars. Many people are familiar with money backed by gold, which was once the case with U.S. dollars, but Mendo Credits are backed by reserves of stored food. Our reserve currency has a number of desirable properties at this time in history.

The asset value of Mendo Credits remains stable over a significant time period because we lock in an exchange rate for specific quantities of food for one year from the date of issue. Whereas gold and silver are inedible, Mendo Credits can be redeemed for the sustenance of life. When you hold a Mendo Credit note, you know it represents the quantity of food printed on its face and, if you want or need to, you can actually get that food.

Mendo Credits help with our goal of greater community self-reliance by directing investment

towards essential long-term capital. For example, if a small grain silo costs \$5000 to build, credits can be issued with prices that reflect both the cost of grain and storage. Eventually, local farmers could be contracted to supply grains and dry beans to our silos. Our land base would then have higher value and be able to support more jobs.



Image 4. People redeem Mendo Credits for food in downtown Willits, such as the Community Center pictured here. As our stores become depleted we can decide to issue a new batch of currency. Profits from previous sales plus income from the new Mendo Credits can form the capital to buy more food and replenish our stocks. We encourage household storage and consumption so that the population has their own food buffer and we can expand our capacities.

Currently we buy grains and beans from farms about 150 miles away, which is as close as we can locate. These farms are organic and family owned. The point is that we can decide to support agricultural best practices and once we establish relationships with farmers and become significant buyers, we can seek improvements when warranted.

Our goal to move product aligns with the needs of households to be financially frugal and eat healthy foods. We are selling organic grains and beans at lower prices than in stores, and are developing informative guides for preparing meals around whole and seasonal foods. [Our guides](#) also help families assess how much they eat to decide how many Mendo Credits to buy and whether they want to store significant amounts in their home. Emergency preparedness is enhanced as more families buy in bulk, habitually eat, and restock their food stores.



Image 5. Mendo Food Futures is developing guides for using wholesome, locally grown and potential storage foods in everyday meals and snacks. For example, make your own energy bars with minimally processed grains, toasted nuts, dried fruit and honey. No baking or refrigeration required, and almost universally loved.

Mendo Credits in Practice

When I told my friend Sara about Mendo Credits she beamed with delight, opened her wallet, and showed me an UDIS. A Honduran food and farmer cooperative, COMAL, issues its own local currency called the UDIS for many of the same reasons we started Mendo Credits. It was great to learn that these same ideas had already taken hold elsewhere and have a record of success.

Mendo Credits are just beginning to circulate in the town of Willits, CA and we hope this spreads around our region. Four central downtown businesses are serving as sales outlets for the new currency: The Bank of Willits, Mendonesia Café, The Book Juggler, and Leaves of Grass Bookstore. NCO also sells them at the Willits Farmers' Market.



Image 6. Four downtown businesses sell Mendo Credits. Pictured here is Bank of Willits President Richard Willoughby, who proudly sells Mendo Credits and calls them “real money.”

A local business is currently assisting with transportation and storage. Their truck picks up from farms in the Sacramento Valley and hauls one ton totes on pallets to their warehouse. We transfer from the totes into 3.5 or 5 gallon buckets and take these to a convenient downtown location for distribution. To make it quick and easy to distribute grains and beans, we only sell in specified increments as given on each Mendo Credits slip. For example, 11 lbs of rice can be redeemed for a single Mendo Credits note. We have several buckets of rice to distribute from, each one containing about 40 lbs of rice. When a customer wants to redeem a note for rice, we can place their container on our commercial scale, zero the readout, and pour out 11 lbs.

Mendo Credits are a 100% reserve currency with each note representing some fixed quantity of food. Therefore, the Mendo Credits brought to us for redemption are moved out of circulation. However, redemption of Mendo Credits signals a potential demand, which allows us to issue new notes. We have to watch our supplies of grains and beans and estimate future demand. At some point before all our current food stores are claimed we will issue more Mendo Credits. A combination of profits from previous sales plus the income from new notes, which may not be sold out yet, can go towards buying more food supplies.

This is a small beginning but we are already looking at what it would entail to expand Mendo Credits significantly. We have cost estimates for building large silos along the railroad tracks, for example, and are actively raising funds for several small silos in the meantime. The investment required is substantial, but compared to what our society typically spends it looks like a bargain.

For perspective, the storage capacity to hold enough grains and dry beans to feed the Willits area (about 14,000 people) for one month costs \$120,000. A half million dollars would build the silos, fill them with food, and give us the peace of mind of a one month supply of food for the community, and potentially spawn a revitalization of the local food system, including jobs in farming, food processing, waste recapture, and transportation.



Image 7. Willits is geographically rather isolated, and local officials are concerned about food security with respect to transportation failures. No significant food storage exists in the area, with surveys showing less than a week of food in grocery stores. County Sheriff Tom Allman says a major earthquake could easily isolate us for a month. Patty Bruder (left) and Cyndee Logan (right) of Mendo Food Futures discuss the possible placement of grain and bean silos on City of Willits property adjacent to railroad tracks with the City's Community Development Director Alan Falleri.

Initial enthusiasm suggests that Mendo Credits will begin circulating like cash within town. However, since the supply of Mendo Credits is limited to the supply of grains and beans in storage, they can't become a dominant means of exchange until our local economy has very large storage facilities and is on its way towards food self-sufficiency. In the meantime, they are a fantastic educational device and may spur investment towards local food security.

References

A good introduction to local currencies can be found online at: <http://www.feasta.org/documents/shortcircuit/index.html?sc3/c3.html> and Big Gav wrote a nice article about them too: <http://anz.theoil drum.com/node/4633>

Treating food security as an income issue is evident by questions in this survey: <http://www.fns.usda.gov/fsec/FILES/FSGuide.pdf>

For further explanations of how our present financial system works see: <http://www.chrismartenson.com/> and <http://www.moneyasdebt.net/>

An article in English about the UDIS can be found here: <http://www.new-ag.info/09/01/develop/dev3.php>

Energy Bar Recipe

Ingredients

- 1 cup finely chopped nuts and seeds
- 3 cups rolled oats
- 1 1/4 cups dried fruit, half finely chopped (size of small raisin or less) other half pureed.
- 1 1/2 cups cereal
- 1 1/2 cups water
- 3/4 cup honey
- 1/2 teaspoon salt
- 3 tablespoons vegetable oil
- 2 teaspoons of seasonings (e.g., vanilla extract, cinnamon, etc.)

Instructions

Lightly toast the nuts and rolled oats. Combine toasted nuts and oats with chopped dried fruit. Boil water, add cereal, stir and then let sit for 3 minutes. Mix pureed fruit, honey, oil, salt and spices into hot cereal and keep on low heat for 7 minutes. Combine all ingredients, press into ca. 9 x 13 inch pan and let sit for 3 hours. Cut into bars and store in covered container.



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