

Thai Jasmine Rice and the Threat of the US Biotech Industry

This past November in Khon Kaen, Thailand, a collection of villagers, farmers, workers, environmentalists, people with HIV/AIDS, NGOs, and women's networks came together to celebrate Isaan (the people and area of the northeast in Thailand) local wisdom and local culture. The festival, put together by the people's movement against globalization, involved traditional Isaan music and dancing while people sold locally made crafts and products, shared different ideas about globalization and resistance, and drank the recently legalized traditional alcohol like *satho* (rice wine) and *lao* (rice whiskey).

At the festival there were over one thousand Isaan farmers protesting the genetic research of American scientists Chris Deren and Neil Rutger. The two have genetically engineered a strain of the famous *khao hom-mali* (Thai jasmine rice) that they claim is suitable for growing in the US. To Thai farmers jasmine rice, created and nurtured by farmers in Isaan for a generation over, is a symbol of local wisdom and traditional culture. Mr. Gate Kong-Ngam a farmer from Surin province in the Northeast said, "Jasmine rice belongs to Thai communities, and Thai farmers. Our grandfathers, grandmothers, great grandfathers, and great grandmothers have been growing it for millions of years."¹ Another farmer Mr. Samai added, "Jasmine rice is a Thai thing. It's like Thai boxing. It doesn't make sense for it to be anywhere else."²

Thai farmers concerned about future of their valued crop

Thousands of Isaan farmers have been protesting about the jasmine rice case all over the country in the past two months condemning the US and World Trade Organization (WTO) with black magic rituals in front of the US embassy in Bangkok, rallying before the Prime Minister Thaksin Shinawatra on a recent visit to the northeast province of Surin, and burning effigies of US president George W. Bush and head of WTO Mike Moore in Mahasarakham province. Farmers are worried that Chris Deren's new strain of rice will be patented and grown throughout the US, threatening the ability of Thai farmers to export jasmine rice both in the US market and in Europe, Hong Kong, and Japan.

Jasmine rice is one of the most sought after strains of rice in the world and is grown by over 5 million families in Thailand many of whom are in debt and very poor. In 1999 the average income of farming households was 26,822 baht (US\$600) significantly lower than the average household earning of 78,875 baht (about \$1800).³ If the small-scale farmers in Thailand lose the markets for jasmine rice, in particular its main buyer the US, then the viability of their livelihood will be threatened in the future. Ms. Bayoong, a jasmine rice farmer from the central region of Thailand said, "If Americans started growing rice it would affect us for sure, it would make the price of rice fall even further. I don't know if my family can take another hit like that."⁴

Ms. Bayoong is not exaggerating. While jasmine rice accounts for about 25 percent of Thailand's overall yearly rice export, jasmine rice makes up more than 90 percent of the Thai rice that reaches America each year. Last year,

Thailand exported 243,000 tons of rice to the US, its biggest buyer, 200,000 tons of which was jasmine rice.⁵ An American strain of jasmine rice under the control of large agro-industrial companies would greatly undercut that market, striking against the small-scale farmers in Thailand who are already struggling for survival.

Details of how Deren obtained the seed put role of International Rice Research Institute (IRRI) in question?

As farmers worries grow, details of how Chris Deren obtained the strain of jasmine rice are still unclear. Deren, a professor at the University of Florida's Institute of Food and Agricultural Sciences, claims he got the seed from the International Rice Research Institute (IRRI) in the Philippines in 1995. Yet IRRI has no record of Deren taking the seed, and never informed the Thai government of his doing so.⁶ As a result Thai authorities are questioning the responsibility of IRRI, which holds over 86,000 strains of rice collected from all over the world—5,500 of which are Thai.⁷

IRRI is an international agency funded through the Consultative Group on International Agricultural Research (CGIAR) which operates under the World Bank. It was created to aid developing countries by promoting food security and eradicating poverty.⁸ Yet at a press conference held in Bangkok on 2 November 2001 many farmers networks and NGOs throughout Southeast Asia stated that the much of the work of IRRI has in fact gone against the interests of Asian farmers. They claimed that rather than safeguarding the local wisdom and seed varieties of Asian farmers, the practices of IRRI favor the interests of agro-industrial corporations by lending themselves to biopiracy, which ultimately undermines food security and creates poverty throughout the region.⁹

According to an agreement with the UN Food and Agriculture Organization (FAO) researchers requesting seeds from the institute must follow the Material Transfer Agreement (MTA), which firmly states the recipient cannot seek to patent or monopolize donated seeds from the Institute. Yet Deren never completed an MTA upon receiving "Jasmine Rice 105" seeds from IRRI.¹⁰ According to Mr. Boriboon Somrith, Thailand's liaison officer for IRRI, "Generally the institute does not enforce the 'Material Transfer Agreement' seriously because we consider that transferring genetic resources among researchers is a common activity."¹¹ This irresponsible behavior puts the traditional knowledge of farmers at risk jeopardizing the stability of Asian rice farming in general. While Deren claims he will not seek a patent for his new strain of jasmine rice, Thai officials won't be satisfied until he signs a formal agreement with the government.

The Outcome of Deren's Experiment; a matter of \$100 million a year

After obtaining the seed, Chris Deren genetically mutated the rice with gamma rays to make the plant mature earlier and grow shorter. Both qualities are necessary for making the rice more suitable to the American climate and for the US preference for mechanical harvesting. In fact, Deren reports that the crop is not dependent on seasonal fluctuations and will consistently ripen in 90 days, regardless of what season it was planted in.¹²

The research was conducted at the University of Florida, in collaboration with the University of Arkansas, and was funded by the USDA's National Rice Research Center. Deren claims that his research has produced "very satisfactory" results, and that his rice is just as aromatic and delicious as the Thai jasmine rice.¹³ While Deren's rice will not be suitable for commercial production for a few years, US biotech corporations watch eagerly, hoping to get a stake in the expanding global market for jasmine rice.

News of Deren's experiments have already reached the business community in the US. Klaus Sengleemann, general manager of Semi-Chi Rice Products an American company in Florida said the research had caught the attention of many businesses in the field.¹⁴ According to the company, a jasmine rice variety that is comparable to jasmine rice imported from Thailand could bring in a sizeable profit. Currently regular varieties of American rice sell at \$340 US per ton, while jasmine rice from Thailand sells at \$520 US per ton, a difference of 44 percent. This year Thai jasmine rice sales in the US translated to about \$120 million dollars.¹⁵ If this \$120 million dollar market diminished then it would have a drastic effect on the Thai rice export, which would hit Thai farmers the hardest.

Branding the Asian rice bowl: the case of India's Basmati rice and RiceTec's Jasmati rice

Because of the high value of Asian rice strains American companies have been vigorously trying to get a share of the markets for these popular strains of rice. Recently, the Indian government learned that its traditional basmati rice exports will be undercut at a cost of close to \$200 million a year by a genetically modified strain that is a Texas grown version of India's Basmati Rice created by the US Biotech firm RiceTec Inc.¹⁶ In a highly controversial case RiceTec won the ability to claim monopoly on its American made basmati-like rice, and even market it as "superior" in quality to the Indian parent variety.

But that's not all. In September 1997, RiceTec won rights to trademark a brand of rice it calls *Jasmati*. Jasmati is marketed as a "Texas-grown copy of Thai jasmine rice" even though it has no relation to either Thai jasmine rice or India's basmati rice.¹⁷ The Jasmati rice is actually derived from a combination of Italian Bertone rice and a US variety called Della.¹⁸ Yet the company is able to mislead consumers into believing they are getting a combination of jasmine and basmati rice, the two most popular imported rice strains in the US.

In fact, a recent market survey completed by the Thai commercial attache in Washington illustrated that more than half of the consumers in the

US bought Jasmati because they believed it was related to jasmine and basmati rice.¹⁹ RiceTec's Jasmati has already affected Thailand's export market of jasmine rice.

US holdup of Jasmine rice threatens future US-Thai relations

The controversy over jasmine rice has created a lot of negative feelings amongst Thai farmers and Thai citizens towards America. It is now a common sight to see farmers wearing Bin Laden t-shirts in their protests, and the protests are becoming more aggressively anti-American. While most farmers don't support the violent acts of September 11th many of them sympathize with Bin Laden's anti-American sentiments. Mr. Bamrung Kayotha a leader of the farmers networks asserts, "The Americans are the ones that set up this "you're either with us or against us" thing. I'm not a terrorist but I don't like that they've stolen our rice."²⁰ Another farmer, Mr. Pun Jaoiewiang, age 52 from Khon Kaen province, adds, "Thais and Americans have always been like brothers and sisters. But if we continue to have oppressive policies towards each other, like with this jasmine rice, then we will lose that brotherhood for sure. Unless the US returns the rice to us, we will declare ourselves her enemy for good."²¹

Biotechnology: Small Countries find it hard to compete; Small holders find it harder to survive

The Thai government has assured that it will be actively investigating Deren's research, and any other research conducted on Thai jasmine rice. It has already appointed two lawyers to investigate the situation, and has also given funds to the Thai biotec research center to identify the genome of jasmine rice in order to defend it from outside researchers and companies.²² But NGOs aren't yet sure how far the Thai government is willing to go to protect the countries valuable rice variety. Rather than being a legal question they claim it is more of a political question.²³ How far is the Thai government willing to push the US in the midst of the US war and global recession? The question remains unanswered.

But it is the small-scale farmers of Thailand that have the most to lose in this situation with jasmine rice. Losing much of their export market for jasmine rice adds more problems to Thai farmers who have been struggling with soil erosion and serious debt as a result of the green revolution.²⁴ According to the Bank for Agriculture and Agricultural Cooperatives (BAAC) in Thailand there are currently 4.65 million farming families whose total debt to various lending banks comes to 300 billion baht (about US\$7 billion).²⁵ That means on average each family's debts of about 64,000 baht (about \$1500) is more than twice the 27,000-baht average annual income of farming households.²⁶

For the past decade Thai farmers have been protesting the Thai government and agro-industrial companies demanding changes in the countries agricultural sector. The loss of one of their most important crops, jasmine rice,

is not the type of change that they were hoping for. Mr. Loi Lerngram a farmer from the northeast says, "To patent jasmine rice or to misuse its name is plundering from the poor. Anyone who would steal from the poor Thai farmers is really shameless."²⁷

WTO's TRIPs agreement giving Biotech companies the edge in agricultural trade

The current situation with jasmine rice raises many issues about the current framework governing global trade in agriculture. If America is eventually able to get a patent on a modified version of Thai jasmine rice, like it has on India's basmati rice, then Thailand will be forced to comply with it under the infamous WTO agreement known as the TRIPs (Trade Related Aspects of Intellectual Property Rights).

TRIPs imposes a uniform standard for intellectual property protection throughout the world; protecting patents, trademarks, copyright etc. TRIPs was created at the 1994 trade round of GATTs which gave birth to the WTO, has been resisted by many countries throughout the global south who argue that it allows transnational corporations (TNCs) from the North to exploit the biological and genetic diversity found in the South.²⁸ Under TRIPs companies can obtain patents over plant varieties, which are the basis of food security, and health care throughout the world. Yet in order for the plants to be patented they must be altered in some way so that they are distinctively different from the original organism found in nature.²⁹

As a result, a country like Thailand has no authority to patent its jasmine rice as it already exists. It could only patent a new variety of it that altered one or two genes within the genome. This gives global biotech and drug companies the advantage for once their products are patented they can claim monopoly rights so that anyone wishing to use their product will have to pay the owning company.

By building seed monopolies Biotech companies can further control the process of food production requiring farmers to buy seeds expanding their input costs significantly. By giving advantage to TNCs TRIPs implicitly favors the economies of the developed world, as almost all of the companies large enough to do global research on biological resources are based in the North. This explains why a farmer from Isaan held a sign in Bangkok protesting the WTO TRIPs agreement reading "TRIPs: Seeds of Colonization."

This case study of jasmine rice in Thailand also illuminates what the future of world agriculture may look like with the rise in genetic engineering and biotechnology on the farm. This is a future where the farmer has even less control over food production, becoming little more than factory machines into which corporations pump inputs and materials into and then take control over the subsequent output and distribution processes as well. Meanwhile the consumer has no ability to make an educated decision over whether they are buying genetically engineered food or not as labeling GMOs "unfairly discriminates" against biotech companies who already have all the cards

stacked up in their hands. Situations like this make one question where the freedom lies in the so called "free trade" and "free market" championed by corporations and governments around the world.

International solidarity the key to resistance

While the story told above may seem a little bleak, all is not lost. In fact a broad global coalition of labor unions, religious groups, feminists, farmers, HIV/AIDS activists, anarchists, environmentalists, and concerned citizens are coming together and creating alternatives. Since the problems that we are facing in our communities are truly global in their nature, we must come together as people and seek out global solutions together, which will benefit us all.

Thai farmers need the help of international citizens. By linking up with people from around the world the Thai farmers have a better chance of protecting their highly prized jasmine rice, and therefore the sustainability of their livelihoods. If you wish to help farmers in Thailand in their struggle you can:

-Write a letter to your trade representative urging them to further revise the WTO TRIPs agreement, calling for all biological resources to be void from the TRIPs agreement

-Write a letter to Chris Deren at:
5881SW Market St
Palm City, FL 24990-5124

or email him at [cwg@gnv.ifas.ufl.edu](mailto:cwd@gnv.ifas.ufl.edu) Urging him to sign a formal agreement with the Thai government saying he will not sell his rice to a company who may control over his new strain of rice.

-Write a letter to the United States Department of Agriculture urging them to halt all research that will threaten the export viability of crops from the developing world, which millions of farmers depend on. Send to:

Office of the Administrator
Floyd P. Horn
Jamie L. Whitten Building 302-A
14th and Independence Ave
SW Washington 20250

Or email him at admars@ars.usda.gov

- Organize teachings, rallies, actions in your local communities about the current context of Biotech corporations and their attempt to seize jasmine rice from poor farmers in Thailand.

For more information on the WTO's TRIPs agreement see:

- www.grain.org/publications/chapter5-en-p.htm
- www.grain.org
- http://iisd.ca/trade/trips.htm
- www.attac.org/nonewround/wto/wto02.htm
- http://flag.blackened.net/revolt/ws/2001/64/trips.html

For more information on the patenting and genetic engineering being done on Asian rice see:

- www.grain.org/publications/rice-en-p.htm
- www.poptel.org.uk/panap/archives/la-thais.htm
- www.biotech-info.net/thai-farmers.html
- www.american.edu/TED/thairice.htm
- www.eftafairtrade.org/Document.asp?DOCID=202&tod=4553

For more information on the WTO and Globalization in general see:

- www.wtowatch.org
- www.focusweb.org
- www.wtoaction.org
- www.canadians.org
- www.globalizethis.org
- www.ifg.org
- www.wto.org

Contacts to NGOs working on this issue:

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-RRAFA- Rural Reconstruction Alumni and Friends Association
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International

-ENGAGE- Educational Network for Global and Grassroots Exchange
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12/18/01

¹ Interview , Surin, Thailand, 11/10/01

² Interview, Bangkok, Thailand 11/9/01

³ Staff writer, "*Plan Approved to alleviate farmer poverty*" Bangkok Post, Thailand 11/13/01

⁴ Interview, Bangkok, Thailand 11/9/01

⁵ Piras Elizabeth, "*Thai ricegrowers' protest against the US holdup of Thai jasmine rice*" 11/6/01, www.eftafairtrade.org/Document.asp?DOCID=202&tod=4553

⁶ Staff writer, "*Jasmine Rice Row:US breeder gets benefit of doubt*" The Nation, Thailand, 10/18/01, or see News release, "*US acquisition of aromatic Thai rice breaks trust, tramples farmers, threatens trade and seed treaty talks*" from Thai NGO Biothai, Bangkok, 10/30/01

⁷ Porport Changyawa, "*Call to review IRRI deal*" Bangkok Post, Thailand, 12/3/01

⁸ Piras Elizabeth, "*Thai ricegrowers' protest against the US holdup of Thai jasmine rice*" 11/6/01, www.eftafairtrade.org/Document.asp?DOCID=202&tod=4553

⁹ statement from Francis S. Morales of MASIPAG an NGO from the Philippines, 11/2/01

¹⁰ News release, "*US acquisition of aromatic Thai rice breaks trust, tramples farmers, threatens trade and seed treaty talks*" from Thai NGO Biothai, Bangkok, 10/30/01

¹¹ Press statement, Johan Bosman, of KWIA the Flemish Support Group for Indigenous Peoples, based in Belgium, Europe 11/1/01

¹² "*Gourmet Style Thai Jasmine Rice May Be Future US Crop*" News Release from University of Florida, Belle Glade FL, USA 9/11/01, www.Napa.ufl.edu/2001news/jasmine.htm

¹³ Staff writer, "*US plant breeder cooks up exotic Thai rice*" The Daily News, Chicago IL, USA 9/28/01 <http://origin.dailynews.lk/2001/09/28/wor04.htm>

¹⁴ "*Gourmet Style Thai Jasmine Rice May Be Future US Crop*" News Release from University of Florida, Belle Glade FL, USA 9/11/01, www.Napa.ufl.edu/2001news/jasmine.htm

¹⁵ "*Gourmet Style Thai Jasmine Rice May Be Future US Crop*" News Release from University of Florida, Belle Glade FL, USA 9/11/01, www.Napa.ufl.edu/2001news/jasmine.htm

¹⁶ News release, Kristin Dawkins of the Institute for Agriculture and Trade Policy, Minneapolis MN, USA 11/1/01 or see "*Biopiracy, TRIPs, and the patenting of Asia's Rice Bowl*" from GRAIN an NGO based in the Phillipines 5/98 www.grain.org/publications/rice-en-p.htm

¹⁷ Pennapa Hongthong, "*Govt step closer to legal action*" The Nation, Thailand, 11/14/01

¹⁸ Prangtip Daorueng, "US "patent" on Thai Jasmine rice!" 5/98

<http://eagle.westnet.gr/cgian/jasmati.htm>

¹⁹ Pennapa Hongthong, "Govt step closer to legal action" The Nation, Thailand, 11/14/01

²⁰ interview, Bangkok, 11/9/01

²¹ interview, Khon Kaen, Thailand 12/3/01

²² Staff writer, "Biotec launches rice research unit" The Nation, Thailand 10/19/01

²³ interview, Nicola Bullard deputy director, of NGO Focus on the Global South

²⁴ Ministry of Agriculture and Cooperatives, *Sustainable Agriculture for Environment (SAFE)*, Project Proposal, Thailand, 2001, p. IV

²⁵ Noel Rajesh, "A People's Agenda For Change" Watershed Vol. 6 No.3 March June 2001 p.49

²⁶ Staff writer, "Plan Approved to alleviate farmer poverty" Bangkok Post, Thailand 11/13/01

²⁷ News release, "Thai Peoples Movements Mobilise to Protect Jasmine Rice" from NGO Biothai, Bangkok 4/98 www.poptel.org.uk/panap/archives/la-thais.htm

²⁸ "Biopiracy, TRIPs, and the patenting of Asia's Rice Bowl" from GRAIN an NGO based in the Phillipines 5/98 www.grain.org/publications/rice-en-p.htm

²⁹ "Biopiracy, TRIPs, and the patenting of Asia's Rice Bowl" from GRAIN an NGO based in the Phillipines 5/98 www.grain.org/publications/rice-en-p.htm