

Eisenhower Fellowships Program Report  
Hope Pugh Pjesky  
2008 Eisenhower Agriculture Fellow to Japan, Malaysia and Thailand

A Journey Through Asian Agriculture  
Looking At Food Safety, Defense and Traceability  
And International Agricultural Trade Policy

I feel honored and blessed to have been chosen as the 2008 Eisenhower Agriculture Fellow. My fellowship was a life changing experience that will influence my views about agriculture policy for the rest of my life. I hope to share what I have learned with as many people as possible. I also feel very lucky to have been the first Agriculture Fellow to visit Asia and the first USA fellow to visit Japan. People in Asia seem to be closer to their food than in many other parts of the world. Getting out into the country and seeing actual production was a priority for me. I had a wonderful experience and got to see and experience many different kinds of farms during my fellowship. My topics of study were Food Safety, Defense and Traceability and International Agricultural Trade Policy (and how these two things interact). Because I was the first Agriculture Fellow to visit Asia, I wanted to get a good, overall impression of agriculture in these countries in addition to studying my individual topics. I also needed to develop an understanding of the people and culture in each country in order to understand their views on these issues. I learned a great deal during my short time in these countries but there is so much more to be explored. This report will outline some of the impressions I have following my travel.

### **Many Similarities**

Obviously there are many things about Asian agriculture that are very different from agriculture in the United States, but there are also many similarities. In fact, I suspect that you would find many of these similarities all over the world to differing degrees. The first one is the rising age of farmers. As I am sure you're aware the average age of American farmers continues to rise with each census. Sixty percent of Japanese farmers are over 65 years of age. It wasn't until my last couple of days in Japan that I finally visited some farms that had a younger generation involved with the operation. Malaysia has the same problem; most of the individual farmers in Malaysia are quite old. However, with the boom in the palm oil business there is a new wave of young people studying majors that will allow them to work for one of the large palm oil companies in either the production or processing of the oil. Thailand has the youngest farmers of the countries that I visited, but I am told that many of them are relatively new immigrants from the surrounding countries. Many long term Thai residents have moved away from the farms in favor of the cities.

Another common theme is the lack of an available labor force. Many people might think that there would be plenty of people willing to do farm labor in Southeast Asia, but in each country I heard about the difficulties that they were facing in finding enough labor to work on farms and in processing. In Japan, there were some temporary laborers from China and South Korea. In Malaysia and Thailand, many of their workers were from Indonesia, Bangladesh, Myanmar and Nepal. In many cases I was told that labor was the limiting factor in expansion.

Rising input costs, especially when it comes to fuel and fertilizer, is another universal concern. The huge increase in energy costs that we have seen over the last few years has had an enormous impact on agriculture. We are having the same issues here in the United States, but can you imagine having to import almost all of your animal feed including hay. Not only is the price of feed increasing rapidly but the freight costs to ship it great distances from North America, South America or Australia are also increasing with the price of fuel.

In each country I also saw a recent movement toward building an agritourism industry, value added/direct marketing businesses and regional brands promoting local foods. These are trends that I have also observed in Oklahoma in recent years and I believe that this is happening around the world. In a time where most of agriculture is getting bigger by necessity, these activities are an opportunity for small farmers and ranchers to prosper while staying small if they are willing to do the extra work. This niche marketing has been very successful for many people and I hope it will help the people I met in this part of the world have a successful future.

The last similarity that I will mention is urban encroachment. Farmers all over the world are having the same problems with urban dwellers moving to the country and building a house next to their farm which has in many cases been there for several generations. This would be fine if the new neighbors didn't then expect the farmers to do things differently because it smells or there is too much dust. In the worst cases these new neighbors try to shut the farm down completely. Private property rights are in jeopardy everywhere.

### **Food Safety, Defense and Traceability**

One of the things I was interested to learn in Japan was what drives the apparent hypersensitivity relating to Food Safety and Traceability. Do consumers really want all of the detailed traceability information that we are told they demand? How many of them actually access this information through their mobile phones or the internet? The answer is almost none. As far as I could tell there is no hard data on the number of consumers accessing this information but every food company representative I asked admitted that they think almost no one looks at the traceability information.

The hypersensitivity relating to Food Safety and Traceability is driven by the political parties and the news media. Just as we have seen in South Korea in recent months, food and agriculture are used as political tools in Japan. The opposition political party in Japan knows that accusing the current government of not being vigilant enough about protecting the safety of the food supply will get a lot of press coverage and further their political cause. Also the news media in Japan reports on some issue relating to food safety every day. Everyone cares about food so it sells newspapers and airtime. The demand for traceability from Japanese retailers is an attempt to reassure the consumers that the food is safe.

The belief is that farmers should want the consumer to know that they produced the food, if it is a high quality, safe product. Of course what consumers don't understand is that implementing a complete, farm-to-fork traceability system is very expensive and time consuming. This would be acceptable if the retailers and consumers were willing to pay more for products with traceability but when I asked if they were, I usually heard laughter. Many of the companies that I spoke to whose products are exported to the Japanese market have decided that it is worth incurring this additional cost for access to the market. Implementing and maintaining traceability systems for some commodities that spend their entire life cycle on one farm (ex. Vegetables) is relatively easy compared to commodities that pass through several farms during their life cycle (ex. Beef) or are comingled for storage (ex. Grain). As the retailers push for complete traceability becomes stronger in the future each industry and exporting company will have to decide if access to the Japanese market is worth the extra cost associated with traceability.

To be fair to the Japanese, they do have some legitimate reasons to be more sensitive about food safety. Their government hasn't always handled food borne illness outbreaks in an efficient and timely manner and in some cases, may have been dishonest with consumers. Also, there

have been instances of Japanese food processors substituting ingredients and producing and distributing fraudulent products. Food safety has become an emotional and ethnocentric issue for the Japanese. After the recent incident with poison Chinese dumplings some consumers turned against all imported food, not just imports from China. When it comes to making policy decisions even government scientists quote opinion polls to justify their decisions instead of sound science.

I heard a great deal about Good Agricultural Practices (GAP), Good Manufacturing Practices (GMP), Good Distribution Practices (GDP), Hazard Analysis and Critical Control Points (HACCP) and International Organization for Standardization (ISO) Standards in all three countries. In Malaysia and Thailand most of the focus was on the export market, their domestic consumers and retailers aren't demanding this information yet. Of the above acronyms I was most interested in GAP. Many of the exporters that I talked to in Malaysia and Thailand spoke of the costs and challenges of meeting EUREPGAP standards so they can export to EU countries. There are several variations on GAP now, which include EUREPGAP, Global GAP and Japan GAP.

AEON, Japan's largest retailer, has instituted its own version of GAP. AEON GAP has thirteen control points including, Worker Management, Varieties, Seeds and Rootstocks, Irrigation Water Management, Site Management, Soil and Substrate Management, Fertilizer Management, Pests and Disease Management, Cultivation Management, Post Harvest Treatment, Environmental Concerns, Protection and Management of Workers, Record Keeping and Traceability and Reflect on Consumer's Voice. As you can see, they want to have control of every facet of producing the food and all the details must be reported to them to ensure that their standards are met. There are also regular inspections by AEON staff that must be passed in order to sell any food product to the retailer. They have their own traceability system called "Green Eye" that consumers can use to access all of this information. In many cases the standards don't seem to make much sense. I was told by one vegetable importer that the pesticide standards only deal with how many times you spray not how much you spray each time. Anybody who farms knows that this doesn't make sense and could cause mismanagement in order to meet the standards. The pesticide standards are also somewhat ironic because I was told that Japanese farmers use seven times the amount of chemicals per land area as anywhere else in the world. We all want safe food but it amazes me how many levels of arbitrary regulations must be met that have no real impact on the quality and safety of the food.

Because Malaysia's population is over half Muslim almost all of the food that is sold there must meet Halal standards. The focus of the traceability industry in Malaysia is Halal traceability. I met with the Halal Development Corporation. Their mission is to make Malaysia the worldwide leader in Halal products. Many American companies have been frustrated by the lack of uniformity regarding Halal standards in different countries. In order to dedicate a line in a beef slaughter plant to Halal production for example the resulting product would need to be shipped to several countries but right now every country seems to have different rules regarding Halal. At my last meeting in Malaysia, which was with a traceability company, I was told that there is a movement to establish an internationally recognized Halal standard. If this happens I think there will be opportunities for American beef in this growing market.

## **International Agricultural Trade Policy**

Let me start by saying I began this trip in favor of more open trade policy and my experiences only strengthened those beliefs. In Japan I only met one farmer, a Kobe beef producer, who

said he was in favor of free trade. I was very excited to hear him say "We should all compete." He thinks people in the U.S. want Kobe beef and the Japanese want American beef and I agree completely. Otherwise all of the Japanese producers I spoke to thought that they couldn't compete with less expensive imports. I am not sure that this is true because many Japanese consumers want domestic products and seem to be willing to pay more for them. Japan might be the only place in the world where consumers are willing to pay more for domestic food but I think it could work for their producers. I heard a lot of "Free trade is ideal" which was always followed by the word "but." The "but" usually involved the need to protect the rice and dairy industries. One Ministry of Agriculture, Forestry and Fisheries official did tell me that even though agriculture doesn't want a Free Trade Agreement with the United States many other industries do and therefore the government does. He thinks a FTA could be negotiated in as little as ten years. This would be a tough battle on the agriculture side with the Japanese intent on protecting rice and dairy but he did mention that they knew pork and beef were important commodities to us and there could be some progress on those commodities. It will be interesting to see if his prediction comes true.

In Malaysia they know that they have to trade to survive. It depends on which commodity they produce whether farmers are in favor of free trade. The poultry industry is opposed because of their high cost of production due to the need to import feed. I am not sure that they would have many problems if trade were opened up because most Malaysian consumers prefer fresh, never frozen poultry which only the domestic producers could supply effectively. Most other industries I visited were in favor of an FTA, including palm oil, fruit and tea. In Thailand, which is the only net exporting country I visited, the situation was much the same with poultry being against an FTA and most other industries being in favor. But the power of the large poultry companies in Thailand should not be underestimated. In both countries the negotiations on free trade agreements with the U.S. have been stalled for some time now. The governments in both countries seem to be generally in favor of reaching an agreement. Many cultural obstacles and issues that have nothing to do with food and agriculture are standing in the way. The fact that President Bush doesn't have Trade Promotion Authority right now also presents another roadblock in negotiating a FTA with any country.

## **The Food Crisis**

Food Security wasn't supposed to be one of my topics but sometimes current events take over. I was told that I was in Asia at a critical and historic time for food and agriculture policy. The first thing I heard when I got to Japan was "We are only 39% self sufficient in food production." No matter whom I talked to, whether they were involved with food and agriculture or not, they had a lot of anxiety about Japan only producing 39% of the food its people need. Apparently most people were just realizing that the self sufficiency rate is so low and the poison Chinese dumpling incident really has consumers on edge. Realistically, Japan could never produce all of the food needed to feed its population. There is very little land available and many, many people. Japanese consumers need to realize that other people can and do produce high quality, safe food. When I met with U.S. Ambassador Schieffer, he told me that he had recently given a speech encouraging Japan to look to other democratic nations like the U.S., Canada and Australia to supply the food that Japanese farmers can't produce. I couldn't agree more.

The sad part of the self sufficiency problem is that the Japanese government's farm policy has caused part of the problem. Many years ago Japanese farmers would drain their rice paddies after harvesting their rice crop and plant either wheat or soybeans. When the rice subsidies were raised to their current high levels most farmers felt it was no longer necessary to double crop and this production was lost. This is particularly disturbing because the Japanese are

perhaps most worried about the fact that they produce almost no soybeans which are the main ingredient in most of their favorite foods. Another contributor to the self sufficiency problem is the Japanese distrust of modern production methods such as genetically modified organisms and hormones. I asked the question several times "Will Japanese consumers and retailers start to accept modern production methods in order to help increase domestic production and decrease food prices?" The answer that I usually got was "We don't know." On the day that I left Japan, one brave Japanese company decided to find out by buying GMO corn to make starch that will be sold in Japan. It remains to be seen what the response will be from consumers but if they buy the starch this could be a breakthrough for GMO products in Japan.

The first morning I was in Malaysia the headline on the newspaper that was delivered to my room was "Facing the Food Crisis." Obviously the food security theme had followed me when I moved countries. I read the paper on the way to my first meeting and on one page there was an article about the eleven commodities that currently have government imposed ceiling prices in Malaysia and the possibility of adding more items to the list. On the next page another article talked about the need to encourage more domestic food production. My instinct told me that these two things seemed counterintuitive. That idea was confirmed during my first meeting of the day which was about the Malaysian poultry industry. I was told that the ceiling price that the government has set for fresh or frozen raw chicken is below the current cost of production. Again government policies seem to be contributing to the self sufficiency problem. Malaysia's self sufficiency rate is 72% which is better than Japan but could use improvement. In light of the recent election where the majority party that has been in power for Malaysia's entire history as a nation lost control of five states, I understand them wanting to keep the consumers/voters happy. Keeping food prices low is one way to do that but it is completely counterproductive to increasing domestic food production.

### **Food vs. Fuel**

Another current event that found its way into my fellowship was the food vs. fuel debate. This was an especially hot topic in Malaysia but it was also being discussed in Thailand. The governments in both countries were discussing establishing zones dedicated to the production of food products exclusively and other zones for energy crops. One flaw I see in this theory is all of the crops that are now considered energy crops were once food crops, such as oil palm, sugar cane and most recently cassava and they are still used for food in addition to energy production. Another flaw is, from a purely economic standpoint, it makes much more sense to produce these high value crops and buy the less expensive food that can be produced more efficiently in other countries. After all oil palm can only be produced efficiently seven degrees on either side of the equator. My last argument against food production zones is that land owners should be able to produce whatever they think will work best on their land and the government shouldn't be able to tell them differently.

I know that there has been a lot of negative publicity regarding palm oil production from environmental groups and believe me I think it would be awful to lose the natural beauty and wildlife that exists in this part of the world. The governments in these countries should be sensitive to allowing any publicly owned native forest to be destroyed but private land owners should be able to use their land as they see fit. The ability to plant crops like palm oil and rubber is a tremendous opportunity for them to make a better life for themselves and their families. From what I have seen palm oil is a highly sustainable crop with a long productive life span and all parts of the plant are used or recycled in some way. There is no waste. It is also much more efficient than most other oil crops and has one of the best conversion properties for producing biofuel. However, I was told that there is such a demand for food grade palm oil right now that

not much is being used in biodiesel. Premium quality palm oil only has 1.2% fatty acid content and produces very crispy fried foods making it preferable to hydrogenated vegetable oils.

### **Making Small Farmers Lives Better**

As I mentioned above, the ability of small farmers in Malaysia and southern Thailand to plant oil palm and rubber, which are very valuable commodities right now and will continue to be as long as petroleum prices are high, is giving them an opportunity to have a better life. Another way for small farmers in these countries to have a better life is to have a way to sell their products on the international market. In Malaysia I met with the Malaysian Agrifood Corporation. Their mission is to drive Malaysia's food supply chain management and distribution system towards global standards in safety, quality and sustainability. They are also interested in how to empower small food producers to have the ability to band together and produce for the export market. They asked me a lot of questions about how farmers' cooperatives work in the U.S. and I told them that I think that a co-op might be a good option to try with their small producers.

In Thailand, I visited the Royal Project Development Center at Inthanon and the Inthanon Royal Research Station. This is one of the 36 Royal Project sites. The Royal Project began in 1969 when the King visited this area and observed how the hill tribe people were living. They were producing Opium Poppy and not making much money. The King set forth a vision of a new life for the hill tribes that included a better lifestyle and didn't include opium production. Today there is no opium production in Thailand, instead the hill tribe people produce over 350 different fruit, vegetable, flower and fish products that many people thought could not be produced here. The station is on a mountain and the high elevation makes it possible to produce plants that usually grow in colder climates. Plants have been imported from all over the world and a lot of research has been done on which ones grow the best. This is the only project in the world to get rid of opium production, just think how wonderful it would be if similar things could happen in Afghanistan or in Columbia with cocaine production. They showed me their food safety and traceability systems. Most of the products are sold domestically but some are exported to Europe so they meet all of the EUREPGAP requirements. They also supply the vegetables and fruit for Thai Airways in-flight meals. I got to talk to a farmer who produces celery and Chrysanthemums. He told me that he is rich by Thailand standards. He has about 1 million THB (33,333 USD) in annual sales and about half of that is profit. The average income for this area is 80,000 THB.

The Royal Project is a government initiative and only hill tribe people can participate, the next day I visited KC Fresh which is a private company that contracts with local growers in a similar operation. Each farmer has only about 1/6 of a hectare of land and they work in groups with one member of the group owning a small packing house and managing the planting decisions and chemical use. KC Fresh has a technical consultant who oversees the groups and makes sure that they meet all of the EUREPGAP requirements so that their products can be exported to Europe. She has many challenges in educating these growers about all of the regulations but she feels that she is helping them to have better lives and I agree. They seem to be better off than other Thai farmers.

### **Government Influence over Production Decisions**

I used to think that when someone from another country asked me about subsidies and government influence on my operation it was because everyone thinks we American farmers get huge subsidies. Now I realize that at least in some cases it is because they do in their country. I was amazed at how much influence the government has over production decisions in

Japan and Malaysia. In addition to large subsidies and tariffs for certain crops the Japanese government also provides subsidies to not produce certain crops. The farmers can still plant certain other approved crops on the same land. The milk price is set once a year by the government and has nothing to do with market demand. All imported wheat is bought by the government and any profit that the government gets from reselling it along with the high tariff is at least partially redistributed to domestic farmers. When Japanese farmers build new facilities they can get a subsidy from the national government for 50% of the cost and from the local government for 25% of the cost but in order to qualify they may need to build larger, fancier facilities than they really needed. All of this money being pumped into the farming industry in Japan might be explained by the fact that a vote in a rural area is worth more than a vote in an urban area and there are many very powerful rural politicians. One thing that surprised me is the average income in rural Japan is higher than in urban Japan.

## **Conclusions**

I have always been in favor of moving closer to free trade and letting the free market economy work. After my fellowship I am even more dedicated to these principles. Of the countries I visited I think the agricultural industry in Thailand is probably in the best shape overall. They are a net exporter and don't have any self sufficiency problems. I attribute that to the fact that the Thai government hasn't tried to have too much influence over agricultural production decisions. One professor told me that it was probably lucky that they have never had a good Minister of Agriculture. He said if they did he would have probably messed everything up.

Recently eight of the world's top economists met at the Copenhagen Consensus Center to apply economic and cost-benefit analyses to major policy challenges. They were asked to answer the question, "What would be the best ways of advancing global welfare, and particularly the welfare of the developing countries?" Of over 30 proposed solutions, completion of the Doha Round of trade policy negotiations with substantial reductions in import tariffs and domestic subsidies was rated number two. I guess I am not the only one who thinks that freer trade would be good not just for American agriculture but for the world.

## **Thank You**

My fellowship was an incredible experience and my life will never be the same. I wish to thank everyone at the Eisenhower Fellowships and all of my Program Administrators. You all helped make my fellowship the best it could be. Along my journey from being "Hope san" in Japan to "Miss Hope" in Malaysia and finally "Khun Hope" in Thailand there were so many people that made me feel at home and welcome. The hospitality that was extended to me is beyond description. I hope to have many opportunities to share my fellowship experiences with any interested group and with the news media. This experience will also influence the policies that I help to develop and support through the many agricultural organizations I am involved with and I will be looking for more opportunities to influence these issues. You can read more about my fellowship on my blog at <http://asianagriculture.blogspot.com/>. I also look forward to being an active member of the Eisenhower Fellowships alumni network and hosting fellows in my state, as well as continuing my involvement with the Nuffield Scholars program.