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# Rice Policy in Myanmar: It's Getting Complicated

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#### Background

This paper, building on a 2011 paper on agriculture<sup>1</sup>, is an update and expansion of work by the Myanmar Program at the Ash Center for Democratic Governance and Innovation, Harvard Kennedy School, for Proximity Designs. This paper focuses on the reasons for a sharp rise in paddy prices and rice exports from Myanmar.

### **Paddy Prices and Exports to China Jump**

Paddy prices in March 2013 are up 27% from a year ago, and rice exports have doubled to 1.5 million tons in 2012-13 from the previous crop year. This level of exports, unusually high compared to exports in past years, comes with unchanged rice production. This price jump has taken place while Vietnam's 5% broken rice dollar export price has <u>declined</u> 5.6% in the last year, and the kyat exchange rate has depreciated only 5.8% from March 2012 to March 2013. In other words, if Myanmar paddy prices followed Vietnam's export price and the kyat exchange rate, paddy prices should be stable. Instead, they rose nearly 27%. What is going on?

The main reason for exports doubling has been an increase in exports to China – they are estimated at about 800,000 tons in the 2012-13 fiscal year, up from only about 100,000 tons a few years ago. China has been raising its paddy support prices from \$272 in 2010 to \$421 in 2013.<sup>2</sup> This compares with paddy prices in Myanmar of only about \$200 a ton (K 3700/basket), more or less depending on the year and month – harvest prices are depressed but bounce back after most farmers have had to sell their paddy to repay debts. Basically, it is now highly profitable for traders to buy Myanmar paddy or rice and sell it to China. The traders benefit from the differential, even with high trucking costs. Such exports are legal from Myanmar but it is only semi-legal for Chinese traders to import rice directly. While Yunnan has often allowed border trade that skirts national rules, it appears that the Chinese authorities have begun to curtail the border trade as of March- April 2013.

The outlook for <u>world</u> rice prices in 2013 is for stable or even slightly falling prices. Thailand has huge stocks of rice it has bought under its paddy support program and will have to sell if it is not to spoil. India has had an excellent harvest, and Indonesia and the Philippines – normally large importers – are not buying as heavily as usual. So even if China imported more rice, it would not create a rice shortage. However, border trade that takes advantage of high domestic support prices in China would not necessarily reflect world rice prices. This could result in even larger shipments to China from Myanmar.

<sup>&</sup>lt;sup>1</sup> "Myanmar Agriculture in 2011: Old Problems and New Challenges" by Dapice, Vallely, Wilkinson, Montesano, and McPherson, November 2011.

<sup>&</sup>lt;sup>2</sup> Since China's milling ratio is 67%, it takes 1.5 kg of paddy to make 1 kg of rice; China's rice prices are roughly 50% above paddy prices.

## **Rice in China – Following Soybeans and Corn?**

China has been raising its paddy support price rather substantially for several years. It is somewhat surprising that while paddy prices in dollars have risen 59% since 2009 and in yuan by 47%, the response of rice output has been modest – an increase of 4.7% in three years, or about 1.5% a year. (See Appendix graph 1.) Imports of rice by China are rising from a net (imports less exports) of close to zero in 2011 to 2.5 to 3 million tons in 2012. They are stockpiling rice and/or using it for consumption. The US Department of Agriculture suggests most of rice imports went into growing stockpiles, but this is not certain. If the rice imports are being used for consumption, this would suggest that production is not keeping up with demand growth in spite of very substantial price increases.

It is unclear how much potential there is to increase rice production in China. Yields are already very high, as are fertilizer and pesticide applications per hectare, some of which are causing soil and food quality problems. Much farm land is getting converted to urban uses, and water and pollution problems may be curtailing area expansion elsewhere. It is possible that China is running into difficulties in either increasing area or yields. Data show total farm land in use falling from 130 million hectares in 1996 to 122 million in 2008.<sup>3</sup> Land for rice crops has been stable at 29-30 million hectares since 2008. The Chinese government has said it needs to have 120 million hectares as an absolute minimum for farm land. However, in 2011 it required local authorities to set aside 104 million hectares of arable land, suggesting that the 120 million target level was already under some pressure. The aggressive buying of farmland around the world by China would support this hypothesis.

It may be that rice in China is repeating a pattern seen before with other food grains. Before 1995 China often exported soybeans. By 2010 it was importing 57 million tons. China had been self sufficient in corn before 2010, but it expects to import 10-15 million tons in 2014. China had exported 2.6 million tons of rice a year from 1998-2002 but is now a net importer of 2-3 million tons. It is quite possible that unless better water management or diversion of other crop land to rice is accomplished, the trend towards greater imports of rice will continue. (See Appendix for graphs of crop output trends in China.)

If the borders between Myanmar and China remain open and if China continues to import substantial amounts of rice, then Myanmar will have to take into consideration the price of paddy and rice in China, not just the export price to Africa or other countries. Since the Chinese wholesale <u>paddy</u> support price is over \$420 a ton, and since China's rice production is more than ten times that of Myanmar, there is at least a chance that substantial amounts of rice would flow from Myanmar to China.<sup>4</sup> If the rice prices in

<sup>&</sup>lt;sup>3</sup> A January 27, 2011 story in the <u>China Daily</u> stated that arable land in China had declined from 130 million hectares in 1996 to 122 million hectares in 2008. Since then, considerable conversion of land to urban uses has occurred, so it would not be surprising if arable land had further declined since then. One 2011 study put crop land in China in 2011 at 109 million hectares: http://www.statista.com/statistics/201800/projection-for-total-cropland-area-in-china-from-2010/ In any case, the total crop area appears to be declining, which is not surprising as the age of farmers is high and increasing in China. As they retire or are bought out, the area for farms shrinks.

<sup>&</sup>lt;sup>4</sup> In December 2012, the retail (not wholesale) price of high grade emata rice in Yangon was \$508 a ton. Paddy prices for emata varied but K 4000 a basket implied a cost of paddy of \$218 per ton.

Myanmar and China equalized – and they likely will not due to transport costs and the possibility of official controls on rice imports into Yunnan – the price of rice in Myanmar could increase considerably. Allowing for Mandalay to Muse trucking costs of \$70 a ton, paddy prices could rise as high as \$350 a ton (K6400/basket) or 60% above current levels. That high a paddy price would suggest wholesale rice prices of \$600 a ton or K 1120 per pyi, a third above current retail prices. In that case, rice would be imported into Yangon at about \$400 a ton but exported from central Myanmar to China at a higher price. However, such an extreme outcome is unlikely in the short to medium term.

## If Rice Prices Rise Will Farmers Grow More?

If there were higher rice and paddy prices, that should provide some relief to hard-pressed rice farmers who have had to deal with low crop prices due to the strengthening kyat. However, most rice farmers are heavily in debt and have to sell their paddy at harvest time at low prices. It is only after harvest that paddy prices begin to rise. If farmers cannot get the higher prices (indeed, many have to buy back rice at a higher price later for their own consumption), they find it difficult to intensify their production.

In addition, there are actually labor shortages in many rice growing areas due to migration to major cities and other countries. When rice prices go up, wages also go up. However, farmers often cannot get more credit so have to cut back on inputs as wages rise! While credit from the Myanmar Agricultural Bank has been increased several times and should go as high as K 100,000 an acre next season (from only K 8,000 a few years ago!), it appears that credit remains a huge constraint for farmers. *It would help if the period of repayment for this credit were extended beyond harvest time and allowed farmers to avoid the period of lowest paddy prices*. In any case, it is not clear how much a rise in paddy and rice prices due to higher exports to China would generate higher input use and greater production.

This is important because it appears that the level of rice production in Myanmar has not grown much in recent years. The US Department of Agriculture estimates put rice production at 10.5 million tons in 2010/11, 10.8 million tons in 2011/12 and 10.75 million tons in 2012/13. Even if the level of rice production is somewhat higher, the trend is likely to be correct – our interviews with farmers, traders and millers suggested that a combination of drought in the north and floods in the south prevented any gains in rice output in 2012/13 and may have resulted in a fall in production. If exports rise while production remains unchanged, there will be less available in Myanmar. This is consistent with the sharp rise in paddy prices in the last year. With growing population and incomes, there should be more demand for rice in Myanmar. Ideally, the rise in exports to China should help rice farmers. If the credit constraint remains severe, Myanmar may get the misery of higher retail rice prices without the benefits to producers of a higher price. This scenario could intensify over time if Chinese rice imports grow.

#### **Possible Policy Responses**

China is not going away and will likely continue to raise their support price of paddy, thus leading to higher paddy and rice prices in China. While there will be sporadic attempts to limit border trade, these attempts will slow trade but are not likely to stop it for very long. Therefore, the reality of a "China price" for rice has to be an input into thinking about rice in Myanmar. The best response is to use this high priced market as a way to encourage greater output and income for rice farmers. However, that will require some changes in government policy.

- 1. Encourage the Agricultural Bank to extend loans beyond harvest time so that farmers will not have to sell paddy when its price is low. This will give them profits to re-invest in inputs.
- 2. Allow commercial unsubsidized lending for longer term loans for mechanized tillers and combines to help reduce any labor shortages; also for tube wells.
- 3. Develop a variety of certified seeds appropriate for each region and market. Until now, the emphasis has been on Chinese hybrid rice seeds. These work very well in temperate climates where input control is good, but few areas in Myanmar match this description. Rather, different varieties and qualities are needed for farmers who tend to now use local or home grown seed, often of uncertain quality.
- 4. Continue to develop water control, including ground water, in areas without it.
- 5. Continue to improve farm to market roads and lower overall transportation costs.
- 6. Extend rural electrification so that pumping of water will cost less.
- 7. Develop a stable rice export policy to improve Myanmar's reputation as a reliable exporter.

There are other important steps that ought to be taken, but not necessarily by the government. Improving rice milling and storage can be done by the private sector. Farmers will identify high, medium and low quality markets and plant appropriate seeds for each market if they are available and advertised. Better handling of cargo at the ports will improve rice quality and reduce shipping costs. Better identification of quality fertilizers could be done through dealer associations or cooperatives.

#### **Conclusions**

Exports of rice to China have exploded and are now over half of total exports. Because of high support prices for paddy and thus for rice in China, it is profitable to send rice and even paddy to China from Myanmar, where the imported rice can sometimes get higher local prices. This could draw rice away from "normal" exports out of Yangon and even raise the price of paddy (and thus rice) in Myanmar to a level above the world price, causing imports to Myanmar. Imports to Myanmar would keep the price of rice lower than if the China price set Myanmar's price. The major point for Myanmar is to use this as an opportunity for farmers to get higher prices and to produce more, but this will take different credit and input policies. This is a limited opportunity, for China may prefer to import rice officially by sea rather than informally through Yunnan. Indeed, border checks intensified in March 2013, reducing flows.

Over time, it is possible that China will have difficulty increasing rice output to meet demand. In that case, greater supply from Myanmar would have a ready market, particularly in Yunnan. Changing policies and increasing investment in agriculture and infrastructure would help farmers take advantage of this potential opportunity.

# **Appendix:**

#### Graph 1: Rice Paddy Area, Support Price and Production in China



Index Numbers with 2009 = 100

Sources: FAO, China Grains Market Report Weekly, private communications Recently support prices have risen sharply while area and output have grown very little or declined.

Graph 2: Output of Selected Crops in China: 1989, 1999 and 2009 (Million Tons)



Source: FAO:

Since 1999, wheat, rice and soya output have grown little or fallen; corn production rose sharply.



 Table 1: Rice Output Per Capita in Myanmar, 2007-2012 (kilograms per person)

Table 2: Exports of Rice from Myanmar 2007-2012 (thousand tons)



*Rice exports have more than tripled while output per capita has declined.* 

Source: US Department of Agriculture, <u>Myanmar Agriculture at a Glance, 2012</u> Myanmar has had stable per capita rice production since 2008, but its exports are growing.