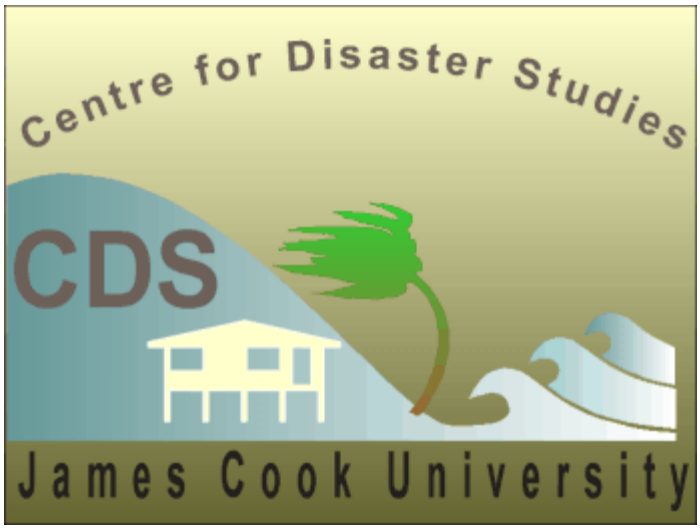

Banana Farms in the Innisfail Region Eight Months After Cyclone Larry: Dynamics of Farm-Level Recovery December 2006

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INTRODUCTION

Jeffrey Glick carried out a survey for the Centre for Disaster Studies to examine the recovery of banana farms in the Innisfail region from 27 November to 3 December 2006.

This study focuses on the current recovery issues for banana farms in the Innisfail region (Johnstone Shire and surrounding areas), specifically focusing on the set of economic post-disaster issues unique to Cyclone Larry. Most farms in the region are now starting to yield bananas (most within the last month) and return their farms to a productive capacity. This report explores some transitional issues as these farms try to return to normal growing cycles and a full productive capacity.

I conducted interviews at a total of 24 banana farmers in the region. In addition to speaking with the owners of most farms, I also spoke informally with farm foremen, employees, construction workers and other people on the farm properties. I also spoke with other locals with ties to the banana industry in some way (banana crate producers, hostel managers, labour employment representatives, former banana growers, construction employees and others).

I attended a seminar put on by the Australia Banana Grower's Council (ABGC) to discuss labour issues on 30 November 2006. This seminar included growers, employment agencies, backpacker lodge managers, ABGC board members, and other groups with an interest in the banana industry. The discussion focused on labour issues in the Innisfail, Tully, and Mareeba regions. From those discussions, it became evident that labour shortages were widespread, but perhaps worse in the Innisfail region.

Most of the discussion herein focuses on a specific set of issues surrounding the banana crop. However, most of the smaller and medium-sized farms in the region are not one-crop-farms, with the majority also growing sugar cane. (A handful of other farms also had cattle, greenhouses for flowers, paw-paws, cocoa, limes and/or pumpkins) So, for the purposes of understanding the post-cyclone recovery of the banana farms, it's also relevant to understand the role that sugar cane plays on these farms.

This report certainly doesn't claim to fully explain the entire post-cyclone story. Rather, the comments and observations in this report primarily reflect the experiences and perceptions on local banana farms after Cyclone Larry. The surveys and interviews raised a wide range of issues relevant to the economic recovery of the farms including: immediate impact of the cyclone, rescheduling of crops, labour shortages, the government's post-disaster assistance, reconstruction experience and other recovery issues.

CYCLONE LARRY'S IMMEDIATE IMPACT ON THE BANANA FARMS

Banana Crop Damage: With regards to the damage to the banana crops, all of the farms in the Innisfail region received 100% damage. All of the 'shucks' (pseduostems) were knocked over from Cyclone Larry's high wind speeds. Some of the farmers recovered banana bunches which had been knocked to the ground, but most others did not. Due to a state of shock about the extent of damage, many farmers did not get out into their fields

until two or three weeks after the storm. Essentially, the damage from Cyclone Larry guaranteed that there would be no banana yield for at least 7 – 8 months on the farms in the region.

Returning to a steady supply: Bananas are unusual in that they are harvested year-round (unlike many other crops which are harvested seasonally or annually). Although relative surges in supply can occur during the summertime months (even in normal non-cyclone years), most farmers are yielding crops on a year-round basis, and they attempt to schedule the crops on their farm accordingly.

There are several reasons for harvesting year-round from my conversations with farmers: to keep full-time labour who can be employed steadily over the course of an entire year (instead of relying on short-term interim labour), to 'hedge' against supply and price fluctuations, to maintain a steady income throughout the year, and to meet the relatively stable demand of bananas throughout the year.

Nine months after Winifred (1986), many farmers reported a supply surge (often called a 'glut') which had a particularly negative effect on prices. These post-cyclone gluts seem inevitable, but about half of the farmers I spoke with acknowledged the problem and have purposefully cut down some of the crops or replanted fields to try and immediately return to a steady supply, anticipating a huge supply surge (and price fall) in the January/February/March period.

Getting the farms back to a schedule which allows for year-round harvest is perceived to be the main post-Larry challenge for the farmers. If banana farmers did nothing following the cyclone (and just let a new banana shuck grow), every single farm would have its' entire acreage yielding bananas simultaneously—around February.

Obviously, any such supply shock is undesirable for many reasons. Primary concerns include the threat of price drops and potential labour shortages. So, the farmers needed to carefully consider the rescheduling of their crops after Cyclone Larry. There were a few basic options after the cyclone (with variations). Farmers could either wait for new shucks to grow up or completely replant a new crop. Additionally, they now have the option of prematurely cutting off banana bunches or actually harvesting them. Most farmers who planted new fields following the cyclone did so a few months after cyclone Larry to guarantee that there would be some degree of crop-staggering. Most farmers believe that returning to this more desirable status of year-round harvesting will take 18 – 24 months. A few other farms (who were taking more deliberate efforts to re-stagger their crops) estimated they would be returning to normal harvesting patterns in approximately 12 months.

Post-cyclone supply gluts are definitely perceived to be undesirable, but somewhat unavoidable for two reasons: First of all, an 8 month post-Larry period without any income creates a sense of urgency for many farmers who already have accumulated more debt (with the government loan scheme) or have significantly dipped into (or totally used up) their savings. Most farmers stressed the need for immediate cash flow. Consequently, there is a desire to yield a crop as soon as possible. Additionally, while the prices are still quite high, farmers feel rushed to get as many bananas out to the

market as quickly as possible before the inevitability of a price dip in February. Sacrificing current income by re-planting fields or cutting off existing bunches is too difficult in the short term.

Farmers did express a great sense of urgency to start making up for losses, especially some of the smaller farms. For this reason many farms are knowingly moving into a supply 'glut' in hopes that enough labour will be available to harvest the bananas and also hoping that the prices don't drop too quickly.

However, the prospect of supply gluts is difficult in a region where getting adequate interim labour is uncertain, especially when backpackers are the source of that interim labour. Just because a farmer is yielding a relatively large harvest of bananas over a short period of time doesn't necessary guarantee he will be able to pick and pack all of the bananas (due to labour shortages).

In the past month, some farmers (but certainly not the majority) have taken further measures by cutting off bunches to guarantee the yielding of fruit during later periods (autumn and winter). These farmers are sacrificing current income in order to accelerate the process of re-establishing a carefully scheduled year-round yield of banana crops.

A high yield of fruit during these months (January/February/March) will likely be followed by a relative decrease in supply as the farms eventually return to a more consistent supply schedule. Some farmers who are prematurely cutting off bunches are trying to yield a harvest during that time when there might be relative dip in supply (and relative raise in banana prices during autumn months).

Preparing bananas for a cyclone? When the farmers were asked 'What could have been done differently?' many of their answers reflected the admission that the banana crops are totally vulnerable to high-wind weather. However, there are a few options. First of all, there is the option of chopping down some banana crops leading into a cyclone season. Hypothetically, this could help to guarantee that the crops might yield fruit a few months after a cyclone (instead of a full 8 – 9 months as is the case following Cyclone Larry). Sacrificing income in this manner is a huge risk in the case that the storm ends up being a non event and wouldn't have destroyed the crop anyway. Then again, if there actually is a cyclone, the farmers would be able to enjoy high post-cyclone prices.

There is also the option of using string to tie one banana shuck to another as a crude attempt to stabilize the shucks. Most farmers said that this method might help with winds under 100 km/hour, but there are certainly no guarantees. The labour-intensive process of tying these strings is unlikely to be worth the effort.

Sugar Cane Crop Damage: Many of the farms I visited grow both bananas and sugar cane (with the exception of the largest farms), so it’s relevant to consider how Cyclone Larry impacted the sugar cane crop. In short, the sugar cane crop 'survived' Cyclone Larry—but not perfectly. With high winds, the sugar cane is generally blown sideways but can straighten itself and continue growing following a high-wind storm. Farmers have been able to harvest the sugar cane crop this year, but that income certainly hasn’t come close to covering losses from the banana farms.

Sugar cane is not a labour-intensive crop like bananas, so the post-cyclone labour shortages have not been a problem (with regard to the sugar crop). However, it has been a poor year for the sugar cane crop due the four-month period of rain following Cyclone Larry. Most farmers I spoke with considered losses to be about 50% for the year. Not only was the tonnage harvested lower, but the concentration of the sugar was also lower due to leaching in the soil from too much rain.

STRUCTURAL DAMAGE AND RECONSTRUCTION

House, Shed, Building, Infrastructure Damage: The farmers reported varying levels of damage to their homes, storage sheds, packing sheds, irrigation systems, fencing, equipment and other physical property. In general, older structures (40+ years old) were destroyed and relatively newer structures stood up to the winds with some minor damage. Most of the damage was to roofs of packing and storage sheds—and most of these had already been repaired to category-5 standards. However, the farmers didn't report that the repairs on their houses were as quick. The delays were not due to problems with insurance claims, but rather long waiting lists for the construction companies in the area.

Reconstruction Experience: Few general comments could describe their experiences with reconstruction—mainly anecdotal in nature. Several farmers with friends or family in the construction business (i.e. a plumber son, a brother working in a roofing company, etc.) mentioned that their repairs were made extremely quickly thanks to those connections. However, most farmers were forced to wait an undesirable amount of time (three months or longer) before repairs. The delays to reconstruction in the rural regions were perceived to be longer than in the town of Innisfail. Some of the farmers were able to get damaged roofs replaced within a couple months, and others were still waiting for building supplies for some of the repairs.

Most farmers didn't report any first-hand problems with insurance claims. However, they perceived that there was a great deal of waste (throughout their region) and some alleged fraud with regards to insurance claims. In general, many farmers believed that the insurance assessors were rushed and were not thorough in their post-cyclone inspections.

Another problem has arisen from the fact that many of the companies taking reconstruction jobs are from other parts of Australia. Consequently, there has been some confusion and inconsistency with updated building codes, especially for roof construction. Some farmers reported that roofs had to be re-constructed (at the insurance company's expense, not their own expense) because an initial round of construction did not meet category-5 building codes. Other farmers said that they were sceptical of out-of-town building companies who were quickly profiting in the post-cyclone building boom.

POST-CYCLONE LABOUR ISSUES

Post-Cyclone Labour Reductions: With the exception of a few smaller farms I visited, most farms had no choice but to reduce their workforce—by about ¾ or more in most cases. One large farm which had 120 employees post-cyclone had reduced to a staff of

10 for the first 6 months after the cyclone. Many of the medium and smaller sized farms had reduced to just one employee following the cyclone. Other smaller farmers stopped employing outside labour altogether. The most imminent reason for the labour cuts was an inability to pay the wages. The prospect of no income (in the months immediately following Larry) forced most farmers to reduce their labour. For the larger farms, even in the case that they could have afforded to continue paying employees (from longer government wage subsides or savings), there simply wasn't enough work on the banana farms once some of the clean-up and replanting activities concluded.

Alternative Post-Cyclone Employment Sources: Following the cyclone, there have been a few sectors (outside agriculture) where labour has been attracted to: Town Council Jobs, Clean-up Jobs and Construction Jobs. The story surrounding these special post-cyclone jobs in Innisfail is complicated—which might warrant some further exploration and research.

Council Jobs: First of all, a number of town council jobs were offered directly by Queensland government at a wage deliberately set below the average banana farm wage. Pre-cyclone banana farm wages were usually about $16/hour and these town council jobs set the wage at $14.50/hour). With the huge flow of money from the Commonwealth Government, it seems like the wages could have been higher, so the intent behind deliberately setting the wages lower than farm wages was unclear. Some of these town council jobs were related to immediate clean-up efforts and others were of an administrative nature. Some of these $14.50 post-cyclone jobs still exist, and many of the farmers knew that former workers were staying in these jobs since, because the work was relatively easy, in air conditioning, etc. It's believed that some of these jobs may be eliminated in the coming months.

Many of the farmers actually took post-cyclone clean-up jobs offered by the council in the months after the cyclone. Besides some clean-up and replanting, there wasn't consistent work on their farms, so clean-up jobs offered them some income. Their equipment (especially trucks) was an asset for the clean-up effort, and many of the farmers took these opportunities. Obviously, they were earning wages higher than $14.50 since they were using their own farm equipment in the clean-up efforts.

Contracted Clean-up Jobs: Much of the public money for post-Larry clean up was contracted out to private companies. These contracted clean-up jobs are far more problematic for the labour supply on the farms. Most of these contractors are paying wages around $20 / hour. Most farmers spoke negatively about the activities of these contracted clean up crews for a few reasons.

First of all, these contracted clean-up companies did not help the farmers with the clean-up of their own land. Most farmers reported using their own labour (or just themselves) for clean-up on their farms. The main clean-up efforts had been in the town of Innisfail. Most of the post-cyclone clean-up effort focused on Innisfail's roads, public lands, and businesses, while the rural areas outside the town were a much lower priority. The government was helpful in some cases in picking up debris put at the side of the road, but there was no help on the farms themselves.

Additionally, the clean-up efforts have gone on for eight months now, and it's reached the point where the clean-up crews seem unnecessary—they are clearing brush on some public lands which are completely out of sight and totally irrelevant. Many farmers described these contracted jobs as cushy 'pick up sticks' jobs that do 'bugger all' while earning high wages at the expense of the tax-payer. Many farmers perceived these ongoing activities to be a waste of the government's money.

Finally, and most significantly to the banana farms, the farmers cannot compete with the $20 wages being offered to do contracted clean-up work. This clean-up work is much easier and less strenuous than work on a banana farm. Most farmers cannot afford to raise their wages to this level, but the pressure to do so is mounting. There is a hope that these contracts will soon expire and the workers will be attracted back to banana farms.

Construction Jobs: There are a huge number of high-paying construction jobs with the building boom in Innisfail, funded from the surge of insurance money. Tradesmen are in high demand, but so too are unskilled workers for all sorts of construction jobs. The wages are much higher than the banana farm jobs and usually the conditions are not as difficult. The farmers are forced to compete with this sector for a limited supply of labour, which is particularly acute this year.

Currently Trying to Increase Labour: At the time of my visit, most farmers were in the process of increasing labour as they were starting to yield fruit. They are forecasting significant increases in the January/February/March 2007 time frame. Other farmers have purposefully cut down some shucks conceding a lower fruit yield in the upcoming months because they anticipate the labour will simply not be available.

Post-Cyclone Wage Subsidy: Most of the farms were able to take advantage of the wage subsidy following the cyclone. The federal government offered wage subsidies of $400 per fortnight for a total of 26 weeks following Cyclone Larry. For the most part, farmers thought that those wage subsidies were somewhat helpful, especially for the smaller farms and medium-sized farms in keeping one or two employees. However, the subsidies could have been improved on a few accounts (discussed later in this report).

High Rents: Rents on housing and accommodation in Innisfail had been steadily rising in recent years. They have increased further in the past post-cyclone year. This type of rent-seeking behaviour is not uncommon in post-disaster environments. The availability of housing decreased due to cyclone-related damage, and prices are pushed up as high-wage paying construction jobs flood into the area. Consequently, any banana farm labour which had moved out of Innisfail during the past year cannot find affordable accommodation in the area if they wanted to move back.

Wages: As mentioned, most farmers reported that their wages had been around the $15-$16/hour level for the past couple years. Most were feeling pressure to increase wages in order to attract more labour and to accommodate for the fact that the work on banana farms was becoming increasingly unpopular (especially with easier and higher-paying alternative jobs in the construction and 'clean-up' job sectors in town).

Backpackers: Backpackers are a significance source of short-term employment for the

banana industry in the region. Overall, the consensus at the AGBC meeting is that backpackers might constitute 20-30% of annual total labour on the banana farms, but they are perceived to be especially important in the coming year due to interim short-term labour demands (associated with the inevitable supply gluts—the first of which is forthcoming in the January/February/March 2007 period).

However, most farmers reported that backpackers are their last choice when it comes to labour. They would much rather employ locals, because the backpackers usually have no experience in the industry, are somewhat unreliable and usually only stay around for about 4- 6 weeks at the most.

There was a belief (amongst some farmers, employment agencies, and hostel managers) that this year will not attract as many backpackers to the region. However, this trend may not relate directly to the Cyclone, but to other factors. There is a belief that work on the farms is somewhat inconsistent and unpredictable, the accommodation in the town is somewhat limited, and fruit-picking is becoming less and less popular amongst backpackers because of the hot/humid conditions in the fields which make work extremely challenging.

As an alternative to bringing in foreign workers (discussed below), there was some discussion at the ABGC meeting about the possibility of loosening existing laws about the granting of work visas to backpackers. Some farmers reported good experiences with certain backpackers in the past, but they had to depart the farm due to an expiration of their work visa. Backpackers from some countries cannot get work visas at all. There is a new government program currently being implemented which creates visa incentives for foreigners who work continuously in the fruit sector for a three-month period. However, further incentives and a loosening of current restrictions on work visas for backpackers might be a politically viable solution for the immediate labour shortages in the coming months.

Backpackers always tend to leave around the Christmas time, and usually find themselves short on cash around the January time-frame. This timing might be particularly helpful for this year's huge labour demand and farms will have to survive with minimal labour through December.

Transportation to the farms: The larger banana farms have an easier time arranging transportation of workers out to their farms. The work is contracted into the farms (and consequently out of their concern), the farms have their own daily transportation, or the backpacker lodges in Innisfail drive workers out to the farms. However, transporting workers out to some medium-sized farms farther from Innisfail is more difficult.

Accommodating workers on the farms: Some farmers acknowledged that accommodation shortages were a significant factor in the labour market. Not only had rents in the area gone up significantly this year, but the supply of housing had also decreased since Cyclone Larry. These high (and rising) rents constitute a huge disincentive for labour who may have moved away from the area to seek other jobs outside the Innisfail area (namely in the cities of Cairns and Townsville).

The idea of housing labour on the farms seems like a potential solution. It was more common 40 or 50 years ago for farmers to house workers on their farm. Perhaps returning to that practice would be a solution to labour shortages, especially during this post-cyclone period.

However, this approach doesn't seem desirable amongst farmers and the comments of a few farmers highlighted this. First of all, there are extra costs involved housing workers—the actual construction of the buildings, maintenance and cleaning costs, and logistical costs of feeding and housing the workers. These costs aside, there are other negative intangibles associated with housing workers on the farms. There are liability, privacy and security issues involved with housing interim labour on the personal properties of the farmers. Finally, all of these aforementioned considerations aside, it would be nearly impossible for farmers to establish accommodation in the short-term for post-cyclone labour shortages in early 2007.

The Foreign Worker Question: Many farmers (privately during the interviews and but not so much during the ABGC meeting) said that foreign workers could be tremendously helpful. Foreign workers would probably keep wages (their labour costs) lower, and they perceived that foreign workers would be reliable, consistent and hard-working (certainly more so than backpackers). However, most admitted that it might not be a good policy for Australia as a whole and accommodation in the towns would not accommodate a flow of foreign workers. Discussion amongst ABGC board members seemed to indicate that the foreign worker question was not politically feasible either, especially as a short-term solution for this year's labour shortages in the region.

POST-DISASTER GOVERNMENT SUBSIDIES, GRANTS AND LOANS

This report is not intended to serve as a critique on the specificities of post-cyclone government assistance policies. It has sought to focus more on the farm-level problems of post-cyclone crop scheduling and labour shortages. However, some aspects (both positive and negative) on post-cyclone government (and private) assistance has impacted the recovery of farms and the region.

Wage Subsidies: Most farmers reported that the wage subsidies were very helpful in keeping some employees on farms. Many farmers who did keep some labour following the cyclone said they would not have been able to do so without the subsidy. The subsidies paid up to $400 per fortnight. The initial subsidy was for 13 weeks after Cyclone Larry and then extended another 13 weeks for a total of 26 weeks.

During the period when subsidies were actually offered, there was not actually too much of a demand for labour on the farms. Perhaps the wage subsidies could have been scheduled at a 26-week period of the farmer's choice. Many would have found a subsidy more useful during the present time (as opposed to the months immediately after the cyclone when there was relatively less work). Now, as the demand for labour on their farms is quickly increasing, the wage subsidies could be helpful in attracting employees back to the farms.

QRAA grant/loan schemes: The Queensland Rural Adjustment Authority (QRAA) is

offering loan/grant packages of up to $200,000 ($500,000 in special circumstances) for primary producers. Up to 25% of the total package can be offered in the form of a grant ($50,000 in the case of a $200,000 package). The packages are interest-free for the first two years, with a 4% interest rate commencing in the third year. The repayment schedule is up to 9-years.

Approximately ¾ of the farmers I interviewed have taken the QRAA packages, and some said that they couldn't have financially survived the past year without the QRAA package. A few of the farmers were currently in the process of applying for a grant/loan package. Two of the farmers had been rejected, but didn't offer specifics about why they were rejected. A few other farmers I spoke with said that they had enough savings to get through the year, and didn't want to incur unnecessary debts, even if the terms of the loan/grant package were attractive.

For the small and medium-sized farms, this package was helpful to cover short-term income losses. However, the larger farms said that the package should have been much bigger to accommodate their needs. The scaling and range (up to $200K) didn't seem to reflect the relative size of banana farms in the region. For multi-million dollar banana companies, $200K is completely inadequate.

Informal Assistance: I asked farmers whether or not 'informal assistance' was a key element in their recovery process—in other words, whether or not farmers in the area helped one another in the recovery process. Most farmers mentioned that there was great inter-farm cooperation with initial clean-up of debris. However, with regards to getting their farms back to a productive capacity, most said that they were just concerned about their own farm.

Private Banks: I didn't ask for specifics, but when asked about their experiences with their private banks and financial organizations, most farmers said that their banks had been extremely understanding and helpful in the past year.

Private Insurance: As already mentioned, most farmers said that the insurance assessment and claims went through relatively quickly. They seemed sceptical about the alleged possibility of cheating, fraud, and sloppy work by assessors in the area. Most farmers said that they had some sheds that were under-insured during the storm.

Even for farmers who didn't actually file insurance claims, Cyclone Larry caused many farmers to update and increase their insurance policies.

CYCLONE LARRY AS A CATALYST FOR CHANGING FARM OPERATIONS

Improving efficiency to start recovering losses: As cyclones have in the past, Cyclone Larry caused considerable disruption to the banana farms in the region. Most of the larger farms admitted that the losses incurred during the cyclone are either directly or indirectly causing changes to the way that they are operating their farm – from both an agricultural and business perspective. As these farms are attempting to return to a fully productive capacity (and start to regain losses from the past year), they are forced to reconsider the efficiency of their labour policies, their packing operations, transport and

other costly processes incurred in farming operations. Many farmers, especially from the larger farms, said that the losses incurred in the past year are forcing them to try and be more efficient in their operations.

Improving/upgrading structures: Older homes, sheds, and other small structures on properties tended to be destroyed. Cyclone Larry offered an opportunity for those structures to be rebuilt in accordance with strict Category-5 building codes. As mentioned, some of the shoddy construction works by out-of-town firms unfamiliar with local building codes have been an obstacle to achieving this goal.

Land Usage on the Farms: Most farmers I spoke with had intentions of trying to get back to the same acreage of bananas. However, in the interim, some have reduced their acreage of bananas, anticipating labour shortages over the coming year and planting relatively more sugar cane in its place. A couple of others were temporarily diversifying their farms by planting pumpkins for some short-term income. Also, Cadbury has offered assistance to several farms in the region to trial cocoa plants starting this year to see how well the crop grows, and a couple of farmers I spoke with seemed to believe that the diversification away from the cyclone-vulnerable and labour-intensive banana crops will be more profitable in the long-run. All farmers I spoke with said that they were planning to eventually (within a few years or less) return their farmers to the same acreage of bananas—no more and no less.

CYCLONE LARRY VS. WINIFRED: DIFFERING EXPERIENCES

Many farmers had been in the region when Category 3 Cyclone Winifred struck in 1986. Those who had banana crops at the time of the storm also lost 100% of their banana crops from that storm. From my conversations with farmers, Winifred differed on a few accounts:

Cyclone Storm Conditions: While the wind speeds of Larry were extremely high, the high winds were not accompanied by the same torrential rains during the course of Winifred. Winifred caused immediate flooding in many of the farmer's fields, while Larry did not. The crop damage to bananas was equally devastating (100% loss). However, the damage to buildings and structures on their property was believed to be worse during Winifred. Most farmers recalled that Winifred's winds (since the winds were accompanied with heavier rains) were actually more damaging to their homes, buildings, and other structures.

Post-Cyclone Weather: The months following Winifred were predominantly dry whereas there was continuous rain for nearly four months after Larry. Many farmers emphasized this difference (in post-cyclone weather) as having implications for the sugar crop and also the reconstruction delays throughout the region. The drier conditions following Winifred were more favourable for clean-up, reconstruction, and also sugar-cane growth. Nearly 4 months of continuous rainfall following Cyclone Larry negatively affected the post-cyclone period for the farms, creating unfavourably conditions for the sugar crop (a vegetative crop which demands more sunlight) in the region, and complicating clean-up and reconstruction efforts.

Post-Cyclone Government Response: Being a "Category 5" storm, many farmers acknowledged that there was a much greater government response following Cyclone Larry. Wage subsidies, and grant/loan offers were offered to most farmers in the region (as long as they could meet certain eligibility requirements). Following Larry, most farmers thought that the government's response was generally well intended and well coordinated, with some recommendations for improvement. However, generally speaking, there has much more recovery money target towards the region following Cyclone Larry in comparison to Winifred. The efficiency and effectiveness of these post-disaster allocations (from the farmers' point of view) seems questionable.

OTHER MISCELLANEOUS COMMENTS AND OBSERVATIONS

Closed Market: Like many agricultural goods in Australia, bananas are a closed market. Farmers are competing solely within a domestic market, so Cyclones in northeast Queensland can have an immediate and drastic impact on the banana supply in all of Australia. Obviously, this is a huge consideration which has an enormous impact on the banana supply. If Australia were not a closed market, the nature of price and supply normalization following a cyclone would be totally different. This is another area which might warrant some further investigation and research (perhaps a cost-benefit analysis of temporarily lifting banana import restrictions in post-cyclone years).

Other farm costs: Most farmers acknowledged that other costs on the farm have increased, but not significantly. Fertilizer costs increased this year, along with transport costs. Most acknowledged that the high fuel prices were the cause and not necessarily linked to the cyclone itself or any sort of profiteering motive.

Post-disaster military presence: Few farmers had direct interaction with the military, but their impressions where totally positive, and some thought that they could have been more helpful and efficient with the clean-up effort if they stayed around longer.

Government cooperation: Most of the farmers said that the government was actually more helpful that expected. The cooperation between the Queensland Labor and Commonwealth Liberal governments was perceived to be quite good. However, the farmers did suggest that while the government efforts were pretty good, the post-cyclone policies could have been better on a many accounts.

CONCLUSIONS

Cyclone Larry was devastating to local banana farms in the Innisfail area. It will take approximately 18-24 months for most farms to get back to pre-cyclone production levels. However, recovering losses could take up to a decade for many farmers.

Farmers have faced difficult decisions as they try to balance short-term needs for income and long-term desire to return their farms to year-round crop scheduling and avoid low-price supply gluts. Prices over the next year will tell a much more accurate story about how bad (good for consumers; bad for farmers) the January/February/March supply 'glut' will be. Ideally, natural market mechanisms will collectively return the Australian banana market to a steady supply that meets aggregate banana demand.

During the process of this recovery, painful price volatility, unpredictability in wage levels and labour supply shortages can be expected. Upward pressure on wages is being compounded by the problem of contracted clean-up jobs in the region and high rents. Perhaps this increase in wages will never return to pre-Cyclone levels and Australian consumers will need to tolerate higher banana prices in the long term.

Many farmers perceive a persistent labour shortage in the region—with this post-Larry year being particularly problematic. If getting labour onto the farms was so easy, the supply of bananas coming out of far North Queensland would be greater and prices would be lower. Fortunately, the market helps to dictate an eventual equilibrium even if the short-term adjustment processes may involve significant pain for the banana farms in the region.

Cyclone Larry attracted significant political attention. Perhaps the Bush administration's embarrassing handing of Hurricane Katrina in September 2005 motivated the Australian government not to repeat some of the same mistakes. On this account, the policies were generous and helpful to the banana farmers. However, the timing of the wage subsidies wasn't necessarily practical. The QRAA loan/grant schemes could have been higher to accommodate larger farms.

There will certainly be more cyclones which wipe out banana crops in this region. Relatively little can be done to prepare vulnerable banana crops to high winds. However, as long as there is a future for the banana industry in far North Queensland, the realities of cyclones must be considered. The case of Cyclone Larry (as well as Cyclone Winifred and others) offer some important lessons for improving farm operations, pre-cyclone preparation, post-cyclone farm recovery, post-cyclone labour dynamics, insurance practices and reconstruction experiences.