

Signs of Distress: Observations on agriculture, poverty and the environment in Myanmar

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A recent news story from Myanmar describes groups of rural women and children gathered along the roadsides, forcing buses passing by to stop, and pleading for food and money. Upon seeing the crazed and desperate looks on the villagers' faces, the passengers and drivers were too afraid to refuse to help. There are also recent reports of people searching for food and looting rice warehouses in several townships. In Yangon, hungry children sit outside people's houses, waiting for the cook to come out and fill their tin cups with rice water that's normally thrown away. Are these isolated instances of hunger or is there a widespread problem in Myanmar?

My message today is that *much* of the population in Myanmar is hungry and poor because both the agriculture sector and the natural resource base upon which it depends appear to be collapsing. Poor people are in grave danger of losing their livelihoods and lives, and urgently need to be protected against these threats.

Why should we be concerned about the possible collapse of agriculture? Because the sector makes up over half the country's GDP and employs about 2/3 of the labor force. There are some 4.5 million farm households in Myanmar and over 85 percent of them cultivate small plots of land less than ten acres in size, which is considered to be subsistence-level. Many of the rural poor are also landless families who work as casual laborers directly on farms. If agriculture, Myanmar's key sector, is in trouble, both the country's food supply and the livelihoods of millions of people will be threatened.

The observations I will make on Myanmar's agriculture, hunger, poverty and the environment are based on field work done in dozens of villages over the last seven years, where I researched farming systems, analyzed rural investments, assessed socioeconomic conditions, and evaluated rural aid projects in both the central and more remote parts of the country. I have traveled in the Ayeyarwady Delta, Sagaing, Magway, Mandalay and Bago Divisions, and the Shan, Kachin and Rakhine States. My visits and research have led me to the conclusion that most people in rural areas are much worse off today than a decade ago. I've observed some disturbing trends; farmers are using less and less fertilizer, families are abandoning farming and becoming landless, yields of key crops like paddy and sesame are declining and rice prices are rising. In June of this year, I saw signs of imminent distress in villages that were not there five or six years ago; now, crops are failing altogether, more children are dropping out of school, large numbers of people appear to be criss-crossing the country in search of paid work, and farm families are going hungry on one meal a day consisting of rice gruel. These disturbing signs indicate that agriculture is not sufficiently productive to sustain a healthy population, and appears to be moving in a downward trend.

Why does food production in Myanmar appear to be in trouble? Although quantitative information is sparse, there is sufficient evidence to suggest three main reasons for declining agricultural production. These three reasons are: inadequate credit, unstable and restrictive market policies and mandatory cropping. Together, these three conditions act as powerful disincentives to national production.

First, farmers have had little credit available to them so they have not been able to invest in new crops and technology to improve production. The loan amount Myanmar farmers receive from the Agricultural Development Bank buys less than a quarter of a bag of fertilizer per acre, when paddy farmers typically need two bags per acre. The available credit amounts to less than \$1 per acre; in Vietnam, it's over \$16. So farmers have had to rely on the only other credit sources available to them, which are informal moneylenders, traders or millers who typically charge 10 to 15 percent interest per month. With such high credit costs and an inability to control production or forecast prices, farmers feel it's too risky to borrow – so their production and incomes remain low.

The second disincentive on agricultural production is that unstable and restricted market policies impose large tax burdens on farmers and suppress farm-gate prices for their output. Even during the years when weather and harvest are good or when world commodity prices are high, Myanmar farmers have not necessarily been able to reap the benefits. For example, paddy farmers must sell a fixed paddy quota to the State at about half the market price, regardless of the amount they produce. Their incomes are further suppressed because rice export markets are closed (except to the State and a few entrepreneurs), which means they can't benefit from higher international market prices.

Markets for agricultural products are not only restricted, they've also been unstable. Where export markets for some products have been open, they have frequently been subject to ad hoc closures. For example, a few years ago, hundreds of farmers in the Dry Zone –Magway area- suffered severe losses at harvest time when the sesame export trade was abruptly closed. The price of sesame dropped drastically and farmers were forced to sell at a loss. Shortly after, the trade ban was suddenly lifted and sesame was again selling at higher prices. But the damage to farm incomes had been done. Farming is a risky enough business that farmers cannot survive without the benefits of reliable and profitable markets.

The third disincentive on agricultural production is that in some key agricultural regions, farmers have had little choice about when and what crops to plant. Farmers are instructed to grow certain industrial crops, such as sugarcane, jute and cotton. I'll explain what's happening in the Delta, the country's "rice bowl". There has been an aggressive effort since 1992 to push double and triple cropping of rice. Farmers there are prevented from growing other nitrogen-fixing and more lucrative crops during the dry season, such as mung beans. Without proper irrigation, drainage and inputs, this intensive monocropping of rice has caused water logging, salt intrusion during the late monsoon and dry season, and forming of acid sulfate soil, all of which lead to severe soil degradation. Draft animal power has grown weaker because of the scarcity of fodder. Weeds, pests and plant diseases previously unknown to the area have also emerged. All of this is culminating in drastic drops in yields. In some townships, an estimated 40

percent of farmers last year faced the impossible dilemma of harvesting less than what they owed to the State. To deliver their required quota, farmers had to buy paddy from the market with money borrowed at exorbitant rates. Their inability to feed themselves is compounded by debts they cannot hope to repay.

So farmers in Myanmar have not had much opportunity to respond to meaningful incentives that would allow them to improve their production and incomes. Instead, farmers have suffered repeated, debilitating financial losses and are less and less able to recover from these losses.

The decline of the agriculture sector appears to be eclipsed by a more worrisome crisis now. This related crisis has to do with the condition of Myanmar's natural resource base – its land, forests and rivers - on which food production and the livelihoods of present and future generations depend. Simply put, the natural resource base seems also in danger of collapsing. Natural resources are a kind of “capital”, and this capital is getting used up in ways that are either costly to recover or in some cases, possibly irreversible.

Let me explain some of the ways the natural resource base is deteriorating. When farmers can't improve their land or soil, they eventually wear it out. For example, in the Dry Zone region where sesame is grown, farmers haven't been able to rehabilitate their soils for years. So soils have become degraded and fragile. In fact, there's very little organic matter going back into them, because villagers have resorted to burning crop wastes and even cow dung as fuel, to cope with the shortage of firewood and other fuels. By converting natural fertilizer into fuel, the ecological cycle is being cut short. I recently saw farmers, tilling rows of sesame in what looked like the sand at the beach! Farmers in that township said their sesame yields had dropped in half in the last few years, from an average of 10-12 baskets per acre to only 5 or 6 baskets.

Because farming has not been productive enough to generate incomes and jobs, the rural poor have had to increasingly look for jobs off the farm. These off-farm job opportunities are very limited in the rural economy. So poor families supplement their incomes by relying directly on common or “free” natural resources. They cut and sell firewood, catch crabs and fish, pan for gold, jade, or mine gems or gather barks and medicinal plants to sell. However, these natural resources are quickly becoming depleted due to mounting pressure from both a growing, needy population and from more powerful, unregulated groups who extract those same resources but on a larger scale.

The more the environment is used up by this “mining” of the land, trees, fish and other resources, the more frequent and severe floods, droughts and other natural disasters will be. Catchment areas of the country's major rivers like the Chindwin and Bago rivers have become denuded of forest cover, contributing to more violent and prolonged flooding of farm communities downstream. Villages in Chin and Shan States have recently suffered severe landslides and soil erosion from extensive cultivation, fuelwood cutting and indiscriminate logging. In the coastal areas, small fishermen are experiencing declining fish stocks, due to over-fishing and destruction of the habitat. There's also less fresh water in coastal wells; in the Delta, I saw villagers spending up to 6 hours, round trip, just to collect fresh, drinking water. Consider that hundreds of thousands, even

more than a couple of million of rural households face these kinds of deteriorating conditions, and you get a sense of the ecological and food crisis unfolding around the country.

This crisis is now being fueled by extreme price inflation, brought on by shortages and years of printing money to cover budget deficits. Prices of essential foods like rice and cooking oil rose an average of 200 percent last year. With the average household spending 70 percent of its income on food, dramatic rises in food prices simply mean more widespread hunger, and even starvation.

How are poor families coping with collapsing livelihoods and incomes? Traditionally, village networks have been a source of mutual support for families in Myanmar, but even these safety nets no longer seem reliable, as many families can barely take care of themselves let alone help others. Without the benefit of formal safety nets and relief assistance, poor families typically cope in ways that threaten their health and survival. For example, when poor households are forced to sell productive assets such as plows, oxen or land, they lose both their means of recovery and livelihood. Having children drop out of school to work severely jeopardizes a family's prospects, and imposes heavy costs, including lost schooling and malnutrition with long-term damage to children. When the poor migrate, they often take up precarious and low-quality jobs in the informal sector far away, and are exposed to debilitating social diseases and dangerous health risks. All of these ways of coping have serious detrimental effects on the human and physical capital of poor rural households. Families become even more vulnerable and exposed to greater risks.

So what can be done to reverse the current trends and reduce hunger and poverty in Myanmar? In the longer term, I believe there's still scope for transforming the agricultural sector by raising the cropping intensity, yields and earnings of the country's millions of small farms, since they've been operating well below their technological potential for decades. These reforms require giving farmers greater access to markets, knowledge and capital. This growth path has been tried and proven by many developing countries over the past 30 years. Neighbors like Taiwan and Thailand invested heavily in agriculture – not just physical infrastructure like roads and small-scale irrigation – but also research and extension, credit, education, health, clean water and nutrition.

The looming crisis however, demands that something be done in the short term. We cannot wait for elusive political changes to come before preventing further hunger, premature deaths, disruption of villages and the creation of refugees over the next few years. Collective action is needed now to create a social safety net that provides poor families with constructive ways of coping with the many threats to their lives. There are two priority activities that can have the greatest impact on the lives of poor people in Myanmar right now: these are food for schooling assistance and cash/food-for-work public works schemes. Both kinds of assistance can meet the immediate needs of vulnerable communities while creating long-term benefits for the community such as education, rural infrastructure and environmental remediation. The food for schooling assistance can help ensure that children are fed and kept in school. This kind of assistance should not be delayed.

The second priority relief activity – cash/food-for-work schemes -- can directly bring much-needed jobs and incomes to distressed rural communities. Villagers can be employed in building low-cost community infrastructure such as tubewells, soil conservation bunds, small check dams, basic farm-to-market roads in remote areas, water collection ponds and community wood lots. These are a few examples of small, rural investments with potential for high returns. If cash-for-works were to be developed, their likely cost would be relatively small since the main expense would be for wage labor. And going wage rates in the rural areas are less than 50 cents a day.

In designing assistance that maximizes transparency and accountability, we can apply many positive and promising lessons from the field. Experience from other complex political situations shows that we should NOT dismiss relief aid so easily and assume that negative impacts are inevitable. There *are* effective strategies to avoid theft and misappropriation of aid. I believe with careful analysis, oversight, planning and commitment, it is possible to focus this kind of aid in tangible ways that support local communities. It could also provide valuable opportunities to practice good governance at the local village and township levels.

In closing, I'd say it's true there are profound regional differences in Myanmar; some regions are more remote and worse off than others. Despite these differences, I believe there is a common picture throughout the country today, and that is this: population is growing, yields are generally declining, and farm output is becoming more variable and unreliable. Non-farm jobs are scarce and low paying. Access to wood, clean water, fish and other “free” environmental goods is getting more difficult. Life is getting much harsher, less secure and less capable of recovery. *This* is the dilemma most people in Myanmar are in, and unless it is urgently addressed with sustained international attention, the magnitude of these rural problems will soon engulf the country's towns and cities.

My own judgment is that the trends are pervasive and at, or near a critical level. We can only expect to see greater instability, negative economic development, extreme poverty, and further loss of human and physical capital for Myanmar. The question to be asked now is this: how much higher must the human toll go before agreement is reached to do something to reverse the trends? Without deliberate and immediate international support, prospects for building a strong society and nation, or even containing disaster, are bleak.

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