Street Festivals Are Big Business, But Profits are Turning Thin

In the week surrounding the full moon festival of Thadinggyut, neighborhoods around the country form night markets with food stalls, carnival rides and even human-powered ferris wheels. In Yangon, these have become a high-stakes business for street vendors, as well as a large source of cash for township governments.

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Zayar Nyein

Uncertainty regarding the national elections on November 8 has caused many business decisions to be put off until later in the year, members of the business community told Myanmar Business Today.

Dr Myo Thet, vice-chairman of UMFCCI said, “Everything depends on the results of the election. If the country goes forward and forms a new government peacefully, the country’s economic situation will be good. Business leaders are hesitant to invest now, but can make informed decisions at that time. We can’t predict the country’s situation even a few weeks into the future, as so many things depend on the results of the election.”

Many issues facing the country will have to be resolved after the elections. According to U Than Soe, an economist and political candidate, “Myanmar’s economy cannot be separated from the country’s political situation. A lack of rules and regulations in business and the extremely high land prices are barriers to investment. The country’s economy largely depends on how much we can improve these weaknesses.”

US engagement with Myanmar will be heavily influenced by the next few weeks. Assistant Secretary of State Daniel Russel was reported last week by Reuters as saying, “It is critically important that all parties accept the results of the polling. Our ability to assist the new Burmese government, let alone to look at relaxation of sanctions ... will depend on our assessment of the integrity of the overall process. The conduct and results of these elections will fundamentally shape our engagement with the Burmese government in 2016 and beyond.”

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Businesses Hesitant in Prelude to Elections

Tourism, investment, legislation expected to resume in late November

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Myanmar imports palm oil to meet cooking demand

Myanmar imported 400,000 tons of palm oil annually to fill demand of edible oil as an alternative, an official report said on Sunday. The most common domestically produced cooking oil is produced from peanuts and totals 500,000 tons per year, while edible oil consumption now exceeds 900,000 tons, the Edible Oil Dealers’ Association was quoted by Xinhua News Agency as saying. The association attributed the low edible oil production to a low number of peanut oil mills in operation nationwide. Since 2011, Myanmar has granted private companies licenses to import palm oil from Malaysia and Indonesia in a bid to meet the demand.

Ooredoo Myanmar to receive IFC loan

Qatari telecom provider will receive a $150 million loan from the International Finance Corporation (IFC), the investment arm of the World Bank, to expand its network infrastructure, the Gulf Times reported. Ooredoo currently operates 2,800 towers, and the company claims that its network can cover 85 percent of populated areas.

Myanmar to receive attention from satellite providers

Pending reconfirmation of a new broadcasting law and further commitments to the development of Myanmar’s infrastructure, the global satellite industry will hold a Myanmar Satellite Forum for the second year. With broadband offering an opportunity to make rapid advances in social and economic development, Myanmar could develop as one of Asia’s fastest-growing markets. The Satellite Forum runs as part of Communicast Myanmar 2015, held at the Myanmar Event Park in Yangon on November 17 to 19.

India to prioritize commercial ties over security in border area

In a strategic shift, the government of India will prioritize commercial links over security concerns in the border areas in India’s northeast, unnamed government officials told the Indian newspaper The Asam Tribune. The officials said that previously they had emphasized only safety in the region, which has been torn by insurgencies. The Indian government is working towards the development of a highway from India to Thailand as part of their government’s Look East policy.

Telecom tower boom is not over yet-report

The telecom tower market in Myanmar is projected to witness fastest compound annual growth rate of over 28% between 2015-2020, according to a report titled, “Telecom Tower Market Forecast & Opportunities, 2020 – Indonesia, Malaysia, Cambodia and Myanmar.”

Myanmar Summary

Construction equipment manufacturer has stated that they appropriately screened mining companies in Myanmar before doing business, The Irrawaddy magazine reported. This comes in the face of allegations that the company has been connected to sanctioned jade mining companies. The report by watchdog group Global Witness claimed that Caterpillar’s, “local dealer is linked to a group of companies which appears to be controlled by US-sanctioned narcotics kingpin Wei Hsueh Kang.”

AYA Bank gets IT upgrade

Myanmar’s Ayeyawady Bank (AYA Bank) has contracted systems integrator NEX4 ICT Solutions to overhaul the financial service provider’s IT infrastructure. From banking, trading to payment services, AYA Bank’s employees across the country create and manage high amounts of data ranging from customer information, financial records and more daily. With increasing growth in business, AYA Bank needed the ability to provision the necessary support to manage the rising data volumes at a cost-effective and efficient manner.
As the world has seen over the last 45 years, solar panels and wind turbines for grid scale power have made impacts due to the lack of continuous wind or sunlight. These renewable energy sources are great for developed economies with 24/7 electricity availability as an add-in to electrical source, but what about Myanmar, which is only just beginning to modernize an inefficient power grid from 1960s infrastructure? Coal has a place in Myanmar’s future thermal power generation plans, but where delivery by rail to remote destinations which is economically impractical, for example in the remote eastern border with Thailand, electricity for rural economic growth needs to be re-thought. Additionally, add in right of way disputes along every meter from point A to point B through rural areas for power projects. Villages in Myanmar have a clear expectation for land compensation and have severely inflated land prices, in which farmers are asking for land compensation as much as $50,000 per acre to place line towers above dirt track accessible farmland.

Coal field/thermal power plant development in Kalawa, Lashio, Tigyit and Eastern Shan areas will connect major dry zone population centers and newly established industrial zones along the Irrawaddy River with 500kV Double Circuit lines. However remote eastern areas sharing a border with Thailand will need years until steady electricity by way of grid expansion reaches towns, villages and factories.

Geothermal power production in Eastern Myanmar will localize electrical production, shortening delivery distances reaching the end user, with secondary benefits like agricultural processing uses speeding rural development. Villages will experience socio-economic improvement of rural productivity and income as well as enhancement of farmers’ skills and capabilities in adopting new technologies and managing bio-resources.

Building Blocks

Rural and Livelihood Development is a key building block in the Central Government’s national development plan, which plans to position the country’s agriculture industry as the food basket of Asia within two decades. These ambitious plans will require tenacity and a steady flow of investments to upgrade machinery, seed stock, fertilizer input, crop handling & storage methods, refrigeration, secondary processing & dehydration.

The bio-village conceptualized by Hishamuddin Koh envisions active participation by farmers in villages with low income and productivity. They can be brought out of poverty if villages have significant acres of land under crop or animal husbandry, for food or biofuels and access to reliable electricity even at mini-scale levels for processing bulk products higher up the value chain.

The proposed project must be cost-effective and capable of promoting self-reliance among the farming community in the pilot village or subsequent close proximity villages. There must be a need for agronomic and technical inputs to enhance greater productivity with a model having a multiplier effect for subsequent similar development in other villages. Technical (including training) is also a key component of self-reliability training to get villages away from continuous need for financial support due to poverty.

Current development plans or bio village concepts are meaningless unless there is a reliable power supply. So the next question to be raised is: How will geothermal power stations and rural livelihood development integrate and co-benefit each other?

Hot Water

2015 Photonix.com electricity consumption per capita rankings put Myanmar at 109.3 kW and USA at 12,185 kW. Myanmar consumption is low, but not because citizens do not want to use electricity, but because it’s simply not available.

With roads leading to the newly constructed geothermal power plants, agriculture transporters can bring necessities to people or crops you sure can’t move income and the economy stagnates. Geothermal Power will provide upgraded transportation routes, steady electricity along with rural & tourism development.

There are at least 39 locations already marked by the Myanmar Engineering Society capable of geothermal power production and some of these hydrothermal reservoirs tie quite close to Yangon which is a significant derertilized resource. Preliminary investigations had been made on 43 locations in 1986 by Myanmar Oil and Gas Enterprise (MOGE). Additional in 1990 UNOCAL in cooperation with (MOGE) conducted analysis of geothermal data from sampling of 15 hot spring surface discharges of 57°C or higher. Surface exploration revealed a total of 92 thermal springs identified in Kachin State, Shan State, Kayah State, the southern part of Rakhine State in Kyaukphyu, central Myanmar, Shwebo-Monywa area and especially in Mon State and Tanintharyi Division. Drilling and testing of confirmation wells is the next step.

The Strong Dollar

Hot spring systems with surface temperatures near or greater than 50°C have potential for Binary Power Plant Generation, with an estimated break even power cost of 5.3-8.6 U.S cents/kWh or in Myanmar Kyat 53-86k per kWh. This pegs a non-fuctuating 13-100kW, which is a main concern for power project funding.

Between June 2012 and October 2015, the Myanmar Kyat depreciated by approximately 35%, from 850 down to 1500 against the US Dollar. Local businesses with foreign denominated loans from abroad suddenly found themselves rushing for a strategy to mitigate currency risk.

In USD terms, unhedged loans using a basket of emerging market currencies and major trading partner’s currencies will minimize the impact of an unhedged position when spread through USD, THB, & SGD for example. This will allow the borrower at disbursement to receive funding denominated in local currency and is a local currency loan liability. All cash flow movements are actually still done in USD.

This will minimize currency risk from Myanmar borrowers and reduce non-performing loans to under 1% for foreign firms able to fund and finance machinery and services. This must be a core part of any discussion involving machinery loans for infrastructure build outs especially on longer term projects such as geothermal energy, bonds, ports and water treatment.

The Ministry of Electric Power has introduced plans to greatly increase hydroelectric and geothermal power production to integrate and co-benefit each other?

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States and regions may obtain foreign financing, but only with union government approval. In the same law, foreign banks will be able to issue loans to State Owned Enterprises (SOE’s) and there are nine clauses de- structing when the Union Government can obtain foreign financing.

The main drawback with these proposed changes is that along with depreciation pressures, in the current FX derivatives market there are no currency forwards for long term foreign denominated loans on the Kyat leaving only the option of Political Risk Insurance to cover currency losses, if at all.

Currency volatility is clearly a risk. Hedging solutions backed by a basket of currencies to mitigate risk and offset losses not effectively covered by commercial markets, should be included in Myanmar’s central risk mitigation strategy by diversifying exposure over a number of currencies worldwide.
Side Effects May Include Shrimp

An inclusive approach bio-village based around geothermal power will increase rural productivity and income alleviation, environmental protection and improvement, as well as capacity building of farmers’ skills and knowledge through technology transfer, management and maximizing the use of rural Bio-resources. Its success will provide impetus and impact in developing other villages. It also addresses the crucial issues of energy and food crisis at the village levels.

The 3A’s (availability, accessibility and affordability) are crucial to increasing farmer’s income and productivity.

Binary Cycle Geothermal Power Plants use much lower water temperatures and hot water resources (200–300°F or 100-148°C). Hot water is passed through a heat exchanger in conjunction with a secondary (hence, binary plant) fluid with a lower boiling point (usually butane or isopentane). Secondary fluid vaporizes, pushing the turbines, which drive the generators. Enclosed secondary fluid is simply recycled through a heat exchanger. Geothermal fluid is condensed and returned to the reservoir.

Binary plants use a self-contained cycle, nothing is emitted.

Exhaust water from power plants can be used in greenhouses, to produce hot water resources, to dry crops, to dehydrate agro-food crops, and to re-circulate energy sources. These benefits would reduce farmer’s production costs and speed rural development with other options of “Zero Waste” utilizing all forms of biomass, from crops waste to grass and weeds and converting these into energy sources.

Keeping Up With Demand

Direct heating applications can use much smaller wells with lower temperatures, so smaller systems with lower cost and risk are feasible. Residential geothermal heat pumps with a capacity of 10kW are routinely installed for around $1,000 per kw which is affordable for townships.

According to the Ministry of Electric Power (MOEP), new capacity must increase at 15% per year to stay even with forecast electrical consumption country wide. Also from MOEP’s figures, total combined electrical generation from hydro, natural gas and coal was 3,495 MW in 2012, but by 2030 the maximum demand will increase to 18,900 MW.

This is a five fold increase in 18 years so the obvious questions are:

- How will the required electricity demand for economic development be produced?
- Which sources and options are available for sovereign, state or municipal fund and finance projects with forward hedging strategies against fuel devaluation and repayment in foreign currency?

Looking out to 2030 Geothermal is not mentioned in MOEP’s installed capacity forecast increases. The question is why not?

Experts estimate older equipment and infrastructure throughout Myanmar currently result in about 40% of generated power not reaching its ultimate destination due to both technical and non-technical losses. This is the exact reason localized power systems are needed for regional areas which will install fully functional smaller KV transmission lines.

Build out and ROI calculating leveled cost of electricity are incredibly important in Myanmar’s emerging economy. Levelized cost of electricity (LCOE) is a measure of a power source which at

Combined Cycle Geothermal Power Plants use new higher import technologies to address the questions of the dilemma in rural communities: Binary Cycle Power Plants of 50-100MW and Small-Scale Geothermal Power Plants under 1MW. This means area specific needs can be addressed and programs designed to fit bio-village requirements in a variety of circumstances allowing rural development to take place. It’s the best of two worlds, clean non-polluting power and constant electricity supply which will preserve the landscape for tourism and boost farming community incomes.

This is what Myanmar needs to assure it stays “a jewel of nature” in our modern world, protected environment but at the same time provides opportunities and potential for accelerated economic growth, by addressing the crucial issues of energy and food crisis at the village level for localized rural development.

David Dalbyne is the Myanmar contact for U.S. EXIM Advisors, a Direct Lender for the U.S. EX-IM Bank with Private Market for Medium Term Loans and Trade Credit Insurance. He can be reached at ddbngh@useximadvisors.com

Hishamuddin Koh has over 25 years of experience in agriculture & rural development and is Executive Chairman of Hisham Koh and Associates and the Myanmar Plantation Management & Advisory Co (MMPAC) along with Myanmar Food Technology. He can be reached at koh@hisham@gmail.com. Views and opinions expressed in this article are the author’s own and don’t reflect Myanmar Business Today’s editorial opinion.

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