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**[Parallel 5] Overhauling the social infrastructure in Asia's rural regions**

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The word “economy” in Japanese, “keizai,” came from the term “keisei saimin”, meaning governing the world and saving people. Perhaps it signifies that a society where people live and work in a healthy state is a form of corporate activity. The corporate philosophy often spoken by Eiichi Shibusawa in “Analects and Abacus” casts a doubt on the validity of short-term thinking that one nation’s prosperity is sufficient. This theme of the development of Asia’s rural regional societies used to be considered outside the global economic framework. By highlighting the world’s poorest (BOP = Bottom of the Pyramid), which some say number 4 billion, we are asking corporations how they can embrace this demographic group in their economic activities and include them in the global market.

Mr. Kumar, government official of Uttar Pradesh, located in the northeast region of India (population: 190 million), explained the Indian government’s role in BOP businesses. The societal foundation of BOP should be the creation of human capital and HR development. Unlike roads, airports or electrical infrastructure, this societal infrastructure is intangible. Traditional areas of this societal infrastructure include education, health, services for the individual and family (housing, information, community, legal and security services). In Indian BOP businesses, there are many examples of entrepreneurship, such as low-cost telephone lines, fashionable yet affordable clothing, sanitary and high-quality surgical services, and so on, all of which are producing high profits.

Mr. Kumar stressed that a paradigm shift regarding BOP is needed. Entrepreneurship in BOP industries is not a form of charity. It is a sustainable economic act that requires price setting and improvisations to realize scale merits. This necessitates seeing things from the perspective of the demand side, not the supply side. We must not allow ourselves to be controlled by preconceived notions, such as the poor are incapable of understanding technology. As proven in trials conducted in the slums of Delhi, just like high-income people, low-income people are able to learn how to use new technology once they understand that it can be useful in their everyday lives. Just as in the allegory of Bata, poor people may want what rich people want, too.

Of course, business means not just opportunity, but risks as well. For safety and sanitary reasons, not everyone from a developed country can live in a developing country. In addition to government and municipal regulations, local power holders and their vested interests are often obstacles to local business activity. The lack of high-quality local public organizations that can play the role of intermediary also makes it difficult to access to the market itself.

Mr. Pun, who overcame these and other challenges to create a BOP business, talked about how with limited resources, using technology and wisdom to its fullest potential, he provides Internet, IP telephone, medical information and other services using a wireless Internet system in over 40 villages in the mountainous regions of Nepal located at altitudes of over 4000 meters.

Even without roads and electrical lines, Mr. Pun's efforts to build an Internet network and provide various services dramatically improved the quality of life in these regions in terms of healthcare, education, telecommunication and trade. In addition, Mr. Pun has utilized the characteristics of the Himalayan mountain region to get villagers to gather information used to monitor global warming as well as provide weather conditions for airlines that have routes in that area. He said that the biggest obstacle to

reaching his goals was not securing funds but overcoming government regulations. For example, because the import of foreign-made electronic hardware was forbidden at the time, he had to smuggle in equipment. Of course, there was also the problem of technological and cultural barriers. It took time for people to understand e-commerce and there was some psychological resistance to the changes in life brought about by the Internet.

Mr. Pun positioned BOP business as a form of innovation = entrepreneurship in an area that no one else has attempted. He pointed out that 75 percent of Asia's population lives in rural regions but that despite their numbers, they are mostly excluded from major forms of economic activity. This is a decisive oversight when talking about Asian economic development and BOP businesses should strive for societal inclusion of the poor. During the Q&A session, when asked why his efforts have been successful, Mr. Pun answered simply, "Because I am local." In other words, in a difficult operating environment, a sustainable business must be run primarily by the people who will benefit from it.

How can Japanese ODA contribute to Asia's rural regions as well as cities? On this theme, Mr. Naohiro Kitano of JICA talked about what his organization is doing in China. In their 11<sup>th</sup> 5-year plan spanning the period of 2006~2010, they are aggressively trying to build a harmonious society that balances the needs of the environment with the desire for economic development. In the field of zero-waste economic development (a recycling-oriented economic system), they are: 1) undertaking concrete strategies for building a zero-waste economy; 2) recycling sewage produced by cities; and 3) promoting the use of bio-gases in rural regions.

At the Sino-Japan Friendship Centre for Environmental Protection located in Beijing, JICA is promoting: (1) a corporate audit committee system used in Japanese systems; (2) environmental education; (3) the maintenance of recycling facility complexes and (4) appropriate management of waste. Until the 1980s in China, a traditional form of

zero-waste economic system was in place where human waste produced by metropolitan areas was shipped to farming communities in outlying regions, as Japan did in the past. However, the decrease in farming communities as a result of urban development and the use of chemical fertilizers resulted in the replacement of this system with a sewage system. Through yen-credit loans, JICA built sewage systems in 59 metropolitan areas, which helped clean up the rivers but raised the new challenge of sewage treatment. In Shimane Prefecture and Ningxia, JICA is supporting a Sino-Japan Friendship municipality project to recycle sewage with the help of grassroots technologies.

The use of bio-gases in rural regions is part of a tree-planting program. Through yen-credit loans, in 30,000 locations in 12 prefectures in the Sichuan region, JICA built methane gas facilities. In an attempt to reduce deforestation caused by cutting trees for fuel, it is promoting the use of methane gas as an alternative home energy source for stove burners and such used by farmers. It is also promoting the recycling of sewage as an organic fertilizer.

One of the core technologies to building a zero-waste economy is a “sub-critical water reaction” system capable of efficiently treating and recycling sewage and organic matter. JICA is considering ways to employ this technology to spread the use of sewage recycling. JICA is painfully aware of the importance of a framework that includes the poor as new participants in the market. Throughout its history, JICA has seen needs change, signifying that its role as a supporter must change, too. Playing the appropriate role that is in tune with these changes, and building the framework for support is JICA’s, and by extension, Japan’s contribution to BOP businesses.

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