



## Short Article

# Helping Poor Farmers in Tsunami-Hit Nations to Recover Land Productivity

Four months after the world witnessed the terrible power of the Indian Ocean tsunami on Boxing Day 2004, the relief efforts have entered the reconstruction stage from emergency assistance. For poor farmers in tsunami-hit nations, the rehabilitation of their farmland productivity is an urgent issue. The contamination of soil by salt is a serious problem in addition to the physical damage sustained by irrigation facilities. Recently, two significant statements were reported on this topic.

A survey by FAO shows that soil salinity problems are less severe than previously expected. More than two-thirds of the agricultural land damaged by tsunami waves in Indonesia, Sri Lanka, the Maldives, India and Thailand can be used for cultivation this year. Due to the humid conditions in most of the countries surrounding the Indian Ocean, salt-polluted arable land has been cleansed by rainfall and irrigation (FAO, 2005a). However, as for Indonesia, which was the worst hit country by the tsunami, the prospect is more pessimistic. Dr. Anton Apriyantono, Minister of Agriculture, Indonesia, says that the rehabilitation of agricultural areas will take between two and five years due to layers of salty sediments covering part of the 30,000 hectares of tsunami-hit rice fields (Jakarta Post, 2005).

Salinization causes reverse osmosis in soil where higher concentrations of salt draw water from plants' roots, which makes crops wither and sometimes die. While the above two statements are somewhat conflicting, they both agree that in considering a mechanism of recovery from salinization, the critical factor is the availability of water to wash the salt accumulated by the tsunami inundation away. Unlike salinization in arid and semi-arid areas, which is caused by long-term misused of irrigation, salinization by flooded seawater is much easier to treat if sufficient water is available. For example, it is reported that paddy fields mistakenly contaminated with brackish water and the consequent damage to rice production could be recovered through one to three sequential processes of fresh water irrigation, plowing and drainage (Hokkaido, 1991). The amount of water necessary to recover land productivity is determined firstly by the concentration level of salt in the soil, then by various secondary factors such as the chemical and physical characteristics of the soil, the drainage condition of the farmland, the quality of irrigation water, evaporation and the salt tolerance of crops. Previous research results have shown that where farmland is saturated with seawater, the amount of water necessary to

recover soil productivity varies between 30 mm and 750 mm, or 300 ton/ha and 7,500 ton/ha. The problem of salinization in tsunami-hit regions might already be solved thanks to heavy rainfall and sufficient irrigation water in some areas, but the problem might be prolonged up to several years on severely damaged rainfed farmland.

FAO has already made a framework for reclamation action plans for tsunami-affected soil, including a classification method of damaged lands and a prescription for reclamation according to the level of damage. One of the reclamation options is to temporarily or permanently diversify the farming system to compensate for the expected losses of food production and income (FAO, 2005b). It should be noted that if it is difficult to acquire sufficient water to reduce salinity levels in the fields, the introduction of crops with higher salt tolerance might be a practical choice. Some secondary crops like soybean or barley are known as highly salt-tolerant crops.

The technical methodology for the rehabilitation of soil productivity is known. The next step will be political support to implement the plans. Policy decisions should be established based on proper understanding of the current situation and future needs in real problem areas. It is important to consider, for example, both short-term recovery and long-term development. The quick recovery of economic activities is vital for the rural poor who lost their means of earning daily income. On the other hand, it is also necessary to look at the whole picture of rural development. We should endeavor not only to recover the damage but also promote more vigorous rural societies, which can overcome vulnerability to natural disaster. The establishment of a reclamation plan for salinization should be based on proper information regarding water resources, farming systems and market structures in the region, which could also be useful to promote sustainable agricultural development. The process of land allocation to reestablish ownership can provide an opportunity to consider proper land policies stimulating farmers to invest in their farmland. We might even consider this rehabilitation process as a positive if the rehabilitation activities succeed in establishing better social security levels and improving rural welfare ■

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*(References available upon request)*

Flash **BREAKING****Empowering Women for Better Welfare**

Across most of the developing world, women are on the frontline in the fight against hunger, poverty and environmental degradation. More than a decade of research by the International Food Policy Research Institute (IFPRI) has demonstrated that empowering women is essential for winning this fight. Securing land rights for women can lead to greater agricultural productivity and improved environmental stewardship. In South Asia and Sub-Saharan Africa alone, there would be 15 million fewer malnourished children under the age of three if women and men enjoyed equal status.

Quisumbing, A. and Smith, L. 2005. Time to Empower Women in the Developing World, Press Statement, <http://www.ifpri.org/pressrel/2005/20050217.htm>, (16 February 2005).

**Tsunami: a Looming Legacy**

The Asian Development Bank reported that the Indian Ocean tsunami could throw nearly 2 million people into poverty if concerns over sanitation and health conditions are not properly and quickly addressed. In India, an additional 645,000 people could join the already 357 million others who were living in extreme poverty in 2002. In Indonesia, where 52 per cent of the population survives on less than \$ 2 a day, the number could increase by more than 1 million. Two hundred and fifty thousand Sri Lankans could be pushed into poverty and in the Maldives, absolute poverty of 43 per cent in 1998 could increase to more than 50 per cent.

ADB, 2005. Increased Poverty to be Tsunami's Legacy, <http://www.busrep.co.za/index>, (13 January 2005).

**Mobile Phones for Agricultural Market Information**

Markets aren't only for the rich. Small farmers worldwide, however, are traditionally victims of their lack of timely information. Since the cost of technologies for us to be made aware of useful price data has declined steadily, farmers in developing countries are beginning to own mobile phones. One scientist indicated that farmers in China could earn 60 per cent more from their crops if they have access to telephones to find out the prices in nearby urban markets. The mobile phone is shaping up to be tomorrow's most likely access device for agricultural market information.

World Resources Institute, 2005. What Would a Small-Scale Farmer in Africa, Peru and India Want with a Mobile Phone or Wi-Fi Kiosk? <http://www.thefeature.com/article?articleid>.

**Cambodia Just Begins Organic Farms**

Cambodia urgently needs to diversify its economy, where the garment industry alone accounts for about 80 per cent of its exports. The government is looking to repeat this success with agriculture. Organic products are one option since the global trend in organic agriculture is rising. Cambodian farmers would be able to see immediate advantages from 'going organic.'

World Food Policy, 2005. Cambodia's Hope for Organic Farms, <http://news.bbc.co.uk/2/hi/>, (4 March 2005).

**Trade Liberalization and the Dynamics of Inequality**

The question of whether trade liberalization is a factor aggravating economic inequalities, between, as well as within countries is drawing more and more scientists' attention. The results of most long-term series analyses show that the evolution of inequality -after decreasing or stabilizing for several decades- was back on the rise during the eighties and nineties. Related to this process, the role of trade liberalization is ambiguous. It may be an enticing factor for the poorest countries to catch up with more developed ones, as long as they enjoy some assets such as a strong and legitimate state system. The evolution of inequality is also contrasted among industrialized countries. As far as the role of the state is concerned, it must be underlined that even if globalization engenders internal inequality trends, governments are supposed to have the means to mitigate them ■

Based on Kaleidoscope, 2005. Problemes Economiques (Economic Problems), No. 2865, 22 February 2005.

**Development and Prospects of the Economies in Asia and the Pacific**

In 2004, developing Asia achieved its best growth performance since the Asian financial crisis of 1997-1998. The region's aggregate real gross domestic product (GDP) increased by a strong 7.3 per cent. In fact, with the notable exception of the Pacific developing countries, nearly all developing Asian economies grew by more than 5 per cent in 2004, a remarkable feat for a region of about 4 billion people. Economic prospects for developing Asia remain auspicious over the next 3 years. The 2005-2007 baseline assumptions for external conditions indicate only a moderate slowdown of average GDP growth for developing Asia as a whole of 6.5-6.9 per cent. In East Asia, average GDP growth will be in the range of 6.7-7.2 per cent. In Southeast Asia, average GDP growth is forecast at 5.4-5.9 per cent, higher than the average of the past 4 years. In South Asia, growth is projected at 6.2-6.9 per cent, substantially higher than historical averages. In Central Asia, growth rates, though fluctuating widely due to developments in the energy sectors of some countries, are expected to settle to more sustainable levels as the effects of economic transition fade. In the Pacific, GDP growth rates will remain on average at around 2 per cent, as the two largest economies Fiji Islands and Papua New Guinea are not projected to perform particularly well. However, rapid income growth several years in a row, together with continued high oil prices, also led to surging imports in most Asian economies. The average current account surplus in the region was reduced to 3.7 per cent of GDP in 2004, down from 4.4 per cent in 2003. Moreover, there is evidence that inequalities have increased significantly in many of the rapidly growing economies of the region. Policy measures to mitigate these inequalities will be particularly important over the next few years ■

Based on ADB, 2005. Developing Asia: Economic Highlights of 2004 and Prospects for 2005-2007, Asian Development Outlook 2005, <http://www.adb.org/>.

## Extra Income Through Planting Peanuts in Lao PDR

The study tour that involved villagers brought about positive change in one village of the Lao People's Democratic Republic. Cash crop production is the priority in Tadlouang village, where only 5 of 62 households own enough land to produce sufficient rice for their own consumption. Peanuts are an important off-season crop that villagers have long planted on nearby hills. When the village head traveled to Kasi district in Vientiane province on a project-funded study tour, he was surprised to learn that farmers there also plant peanuts in their rice fields after the rice harvest, expanding their harvest and their income. He said, "it is not our tradition to plant other crops in our rice fields after harvest. We have never done that before." This year they will and are looking forward to the extra income. There is a sufficient possibility for the Lao People Democratic Republic's farmers to increase their income through growing peanuts in the rice fields after harvesting the rice ■

Based on ADB, 2004. Knowledge Brings Change, ADB Review, A Mix of Information and Small Loans Provides Fresh Opportunities for Poor Farmers in the Lao PDR, <http://www.adb.org/>.

## Immediate Trade Measures to Tsunami Affected Countries

The recent tsunami waves in the Indian Ocean caused the widespread devastation of vital economic sectors of affected countries in the region, seriously undermining their prospects for development and poverty eradication. Enormous damage has been done in particular to fisheries, agricultural, textile, tourism and other export-oriented sectors. The humanitarian response by the international community needs to be matched by a coherent, comprehensive and longer-term package of policy measures and actions to support and revive economic activities in the affected countries. Immediate trade measures for the affected export-oriented sectors could have a strong impact on socio-economic recovery. The UNCTAD secretariat's preliminary assessment indicates that immediate trade measures from the international community could include (i) a temporary provision of duty-free treatment on imports from the affected countries in line with WTO rules and regulations; (ii) an immediate suspension and/or termination of all special trade-restraining measures, such as anti-dumping actions, against products originating from the affected countries, such as seafood and processed agricultural products; (iii) immediate measures to strengthen the capacities of the affected developing countries and their businesses to restore the infrastructure needed to conform with sanitary and phytosanitary standards for their exports; (iv) relaxation of market access for services' providers of the affected countries, so as to help generate additional foreign exchange ■

Based on UNCTAD, 2005. Immediate Trade Measures Can Help Support Reconstruction and Development in Tsunami-Affected Countries, UNCTAD, Press Release, <http://www.unctad.org/>, (18 January 2005).

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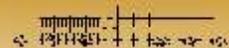
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## Book Review

# Road Development, Economic Growth, and Poverty Reduction in China

Shenggen Fan and Connie Chan-Kang, DSGD Discussion Paper No.12, IFPRI, August 2004

Being endowed with a colossal population of over one billion people of which around a quarter were living in poverty, China had economic development as a real challenge. However, not only was China able to overcome this challenge, but its development performance was really astonishing in terms of annual GDP growth rate and absolute poverty reduction. Achievements of annual economic growth of GDP of 9 per cent for more than two decades since 1978 to 2002 and the reduction of the population of poor people from 250 million in 1978 to just 29 million in 2001 were second to none of those of other developing countries.

While economic development is a complex process that involves social, economic and political factors, one has suggested that the development of infrastructure, such as roads, is one crucial factor for economic development to succeed. The study of Fan and Chan-Kang is set to deal with this road development issue. Its main objective is to analyze the impact of road investment on economic growth and poverty alleviation in China.

The study of this issue is not new, however, since there have been a number of studies conducted in the past. Actually, the study of Fan and Chan-Kang is a farther elaboration of these studies. While the previous studies have confirmed that the current remarkable economic achievements were significantly attributable to road investments in China, they have failed to take into account in their econometric models the fact that the roads developed vary widely in their quality. Fan and Chan-Kang make an effort to integrate these quality differentials in their study. Also, they disaggregate rural and urban areas, as well as agriculture and non-agriculture in their study.

Their study's findings confirm that such differentiations of road quality; economic region; and economic sector are worthwhile. The development of low quality roads made a much larger contribution to national GDP than good quality roads. Similarly, the development of low quality roads is much better than that of quality roads in terms of their contribution to urban GDP, agricultural GDP and rural non-farm GDP. In terms of impact on poverty alleviation, this study also reveals a similar finding in which the development of low quality roads helps a far greater number of urban and rural people out of poverty than that of high quality roads.

What do these findings imply? Most low quality roads developed in China are rural roads. Hence, this study also confirmed the long-standing view concerning the significance

of the poor provision of infrastructure behind rural poverty whose magnitude is much larger than that of urban poverty in most developing countries. Therefore, improving the provision of rural roads in China not only promotes economic growth, but also makes a significant contribution to the reduction of rural absolute poverty whose magnitude is much larger than that of urban absolute poverty in China. Given this perspective, Fan and Chan-Kang advise the government of China to change its current road development strategy, which puts a priority on the development of high quality roads in urban areas, to be one that gives greater priority for the development of low quality roads in urban and rural areas. According to them, this new road development strategy will be 'a win-win strategy for growth and poverty alleviation' for China in the future.

This claim does not appear so clear-cut. As Fan and Chan-Kang have shown in their study, while the condition of absolute poverty has become much improved, that of relative poverty has become increasingly worse in China. This is reflected in the fact of a rapid increase of Gini index of national income distribution from 0.21 in 1978 to 0.46 in 2000. This rapid deterioration of inter-class income distribution presents itself in a variety of forms, such as urban-rural, intra-rural, and intra-urban income differentials.

China is, indeed, now facing a classical problem of a trade-off between high economic growth and worsening income distribution. Solving this problem requires more than redirection of strategy for infrastructure development. As in other developing countries of Asia, most rural poor people in China have to be forced to rely on farming secondary crops such as maize, soybean and pulses on marginal lands for a living. Helping them to improve their income so as to close the existing inter-class income gap will require much more than improvements in the roads.

Altogether this study has made a great effort to obtain some of the insights required to improve China's development performance, especially in the area of poverty alleviation. The literature reviews presented in chapters two, three and four are highly valuable for readers who are interested in China's economic development ■

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