



Short Article

The Ongoing Food Revolution (Livestock Revolution) and Incomes of the Poor

"Lack of policy action will not stop the Livestock Revolution, but it will ensure that the form it takes is less favorable for growth, poverty alleviation, and sustainability in developing countries...." (Delgado et al., 2001)

The livestock revolution is the term used to describe the transformation and rapid changes in the production and consumption of animal products. Population growth, urbanization and income growth in developing countries are fueling a massive increase in demand for food of animal origin. These changes in the diets of billions of people could significantly improve the well-being of many rural poor.

The fundamental aspect of the livestock revolution is that it is driven by demand. In the last few decades we have seen a rapid increase in the demand for meat, milk and eggs throughout the world not only attributable to increases in population but also to large increases in per capita consumption. It is happening due to changes in lifestyles and income growth. This increase in the intake of animal products compares with only marginal increases in the consumption of foods of plant origin such as cereals, vegetables and pulses. By the year 2020, it is predicted that in value terms, products from livestock will equal or exceed those from crops worldwide. The growth of demand for animal products is much higher in the developing world compared to the developed countries. Other aspects of the livestock revolution that can be seen now are: (i) a shift in animal production from temperate to tropical areas, (ii) greater demand for meat from poultry and pigs compared to ruminants, and (iii) a shift in the production base from local, mixed farms to market-oriented agribusinesses (Ranawana, 2004).

Livestock is central to the livelihoods of the rural poor in developing countries in at least six ways (Livestock in Development, 1998). First, it is an important source of cash income. Second, it is one of the few assets available to the Poor, especially the women. Third, livestock manure and draft power are vital to the preservation of soil fertility and the sustainable intensification of farming systems in many developing areas facing increasing population density. Fourth, livestock allow the Poor to exploit common property resources, such as open grazing areas, in order to earn income. Fifth, livestock products enable farmers to diversify income, helping reduce income variability, especially in semi-arid systems characterized by one cropping season per year. Sixth, livestock provide a vital and often the only source of income for the poorest and most

marginal of the rural poor, such as pastoralists, sharecroppers and widows.

Poor people have few opportunities to increase their income because of limited access to land and capital. Small-scale and backyard livestock enable the Poor to earn income from animals grazing on common property pastures or fed with household waste. Livestock production offers one of the few rapidly growing markets that poor, rural people can join even if they lack substantial amounts of land, training and capital. The significance of livestock for women's income in developing countries has been widely emphasized. Dairy cooperatives have in fact been a major means of successfully bringing women in poor areas into the cash economy in many developing countries. Evidence from studies and a pattern from developing countries show that the Poor earn a higher share of their income from livestock than do the wealthy (Quisumbing et al., 1995). Thus, it raises the possibility that the livestock revolution will be beneficial for the Poor. The revolution offers two main reasons for optimism. First, the Poor can more easily improve their income when they have a major stake in a sector that is growing. Second, the current rapid intensification of animal production comes at a time when the rural poor desperately need higher returns to their shrinking land than field crops alone can offer.

Increased consumption of animal products can help increase the food purchasing power of the Poor. The livestock revolution could become a key means of alleviating poverty in the next 20 years. However, rapid industrialization of production abetted by the widespread current subsidies for large-scale production and land use could harm this major mechanism of income and asset generation for the Poor. Policy makers need to make sure that policy distortions do not drive the Poor out of the one growing market in which they have an opportunity to escape the poverty trap.

Livestock products can also benefit the Poor by alleviating the protein and micronutrient deficiencies prevalent in developing countries. Increased consumption of even small additional amounts of meat and milk can provide the same level of nutrients, protein and calories to the Poor that a large and diverse amount of vegetables and cereals could provide ■

Written by Erna Maria Lokollo, Programme Leader Research and Development, UNESCAP-CAPSA, Bogor, Indonesia.

Flash **BREAKING****Poor Women in High Risk Countries**

One woman dies every minute from complications with pregnancy and childbirth - 529,000 deaths a year - and the vast majority are in poor countries. This is because there is a huge gender difference in access to healthcare in rich and poor countries and having children remains enormously risky for women in impoverished nations. Sixty-one per cent of couples worldwide now use modern forms of contraception, but 200 million women in poor countries who don't want another child within two years are not using birth control.

Gardiner, Beth, 2004. U.N. Report: Progress on Health and Poverty. Associated Press, (15 September 2004).

Food Security Still Far, Yet Threatening

Worldwide, nearly two billion people suffer from hunger and chronic nutrient deficiencies. Food security is often undermined by factors such as water availability, land distribution, poverty and environmental degradation. Among the major food security threats on the horizon are climatic change, the loss of diversity of plant and animal species, the rise of foodborne illnesses, and food bioterror.

Worldwatch Institute, 2005. State of The World 2005, Poverty: Disease and Environmental Decline are the True Axis of Evil, Press Releases, <http://www.worldwatch.org/>, (12 January 2005).

A Success Story of Poverty Alleviation

Farmer Maymor, 47, of Nangua village, Baeng district, Oudomxay province in the northern part of Lao People's Democratic Republic, finally ended his slash-and-burn cultivation, having started to grow corn as a commercial crop in 2001 with advice from relatives in another village. He started with 6 kg of corn seed. He harvested 600 kg which sold for 600,000 Kip (about US\$ 60). In 2002, he planted 12 kg of seed, from which he made two million Kip (US\$ 200); in 2003 he planted 15 kg, harvested four tons and sold the crop for four million Kip (US\$ 400). He said "The government's policy and guidance have resulted in my family having more income, and now I have completely ended slash-and-burn. Next year I plan to plant even more corn and earn 20-30 million Kip (US\$ 2,000-3,000)".

Anonymous, 2005. A Success Story, Vientiane Times, (8 March 2005).

Mobile Banking Cars to Remote Farmers in Viet Nam

More than 240 mobile banking cars, funded by the World Bank, are bringing banking services to people in rural and remote parts of Viet Nam at an average of 62 remote locations a month, making many loans. Most loans were small, on average VND 5.4 million equal to US\$ 360, and were used to expand farm production, agricultural processing, services and trading. Viet Nam's banking sector, particularly banking in rural areas, is critical to the country's growth and ability to reduce poverty.

World Bank, 2004, Viet Nam: World Bank-Financed Banks on Wheels Bring Services to Remote Farmers, Businesses, <http://www.worldbank.org.vn>, (30 March, 2004).

Tsunami Increased the Number of Poor

The wall of water that ripped across southern Asia on 26 December 2004, killing more than 150,000, could throw nearly two million additional people into poverty. The poverty impact of the tsunami will be enormous, said Ifzal Ali, Chief Economist of ADB. Poverty is potentially the most important effect of this natural disaster. In Indonesia alone, nearly one million people could be thrown into poverty by the lingering effects of the tsunami's devastation. In India, the number of poor people in the country could increase by 645,000. In Sri Lanka, the figure is estimated at about 250,000. In the Maldives, about half of the country's houses were affected and more than 50 per cent of the population could fall into absolute poverty resulting in 23,500 additional people dropping below the poverty line. In Indonesia, India and Thailand, the damage is largely confined to rural areas ■

Based on ADB, 2005. Tsunami Could Throw Nearly 2 Million Additional People into Poverty in the Affected Countries, ADB, News Releases, <http://www.adb.org/>, (13 January 2005).

Promoting Rural Development to Alleviate Poverty

About 900 million poor people or three-quarters of the world's 1.2 billion poorest people live in remote, rural areas and depend on agriculture for their survival. Ecologically fragile environments and natural disasters frequently work against poor farmers. Discrimination can also impoverish. As a result, an increasing number of rural people in Africa, many parts of the Middle East, Latin America and Asia are moving to cities in search of employment. In fact, rural-urban migration accounts for about 40 per cent of today's urban growth. However, such migration is not fueling economic growth in the developing world. Poverty is simply moving from rural areas to the cities. Rural development, therefore, must be the first step in fighting poverty and investment in agriculture is key. In most poor countries, agriculture is still the largest employer, job creator and export earner. Research has shown that for every dollar spent on agriculture, another two dollars is generated for a developing country's national economy. Furthermore, history has demonstrated that agricultural development can generate increased incomes, which lead to savings and investments, and finally to greater demand for goods and services ■

Based on Rahman, Atiqur, 2004. Rural Development is Key to Tackling Global Poverty - a View from IFAD, Habitat Debate, Opinion, <http://www.unhabitat.org/hd/hdv10n3/14.asp>.

China No Longer Needs Food Aid?

In the past quarter of a century the UN-World Food Programme (WFP) has helped feed 35 million Chinese, but it now says China no longer needs its help because the country is no longer one of the least developed, no longer has food security problems, or the lowest per capita income. The WFP is urging China to become a bigger donor instead. The United Nations will phase out its aid programme in China in 2005, but the situation on the ground is more complicated. Despite China's 9 per cent growth rate, wealth disparity between provinces is huge and official statistics show that the number of people living in absolute poverty rose in 2003. Some analysts say that the issue of food security will remain a key priority as millions of farmers leave the countryside for growing cities. As millions move to China's cities, more are slipping into poverty ■

Based on BBC, 2004. China No Longer Needs Food Aid, <http://news.bbc.co.uk/2/hi/asia-pacific>, (13 December 2004).

Improving Aid Effectiveness in Fragile States

Senior representatives of the international community agreed to improve the effectiveness of their aid to fragile states following a two-day forum in London on 13 and 14 January 2005, aimed at preventing fragile states from becoming marginalized from the benefits of global development and poverty reduction. Fragile states are countries affected by weak governance and institutions where delivering aid is difficult but critical to support peace and stability, and to improve the lives of the millions of their citizens who are mired in a vicious circle of conflict, poor governance and poverty. It is estimated that a third of the people living in absolute poverty around the world live in fragile states. These countries present an enormous challenge to the achievement of the Millennium Development Goals and have a major impact on regional and global security. Research conducted by Professor Paul Collier and Lisa Chauvet found that two-thirds of the economic damage by a fragile state are costs imposed on its neighbors. Having a fragile state as a neighbor reduces Gross Domestic Product by 1.6 per cent per annum, and the cost of the average fragile state in economic losses alone is US\$ 100 billion - twice the global aid budget. Further, over 75 per cent of fragile states are conflict affected. They are a major source of refugee movements, drugs transit and in some cases have been used as bases for terrorist activities ■

Based on UNDP, 2004. Fighting Poverty in Fragile States, News Bulletins, <http://www.undp.org/dpa/journalists/subscribe.html>.

Flash EVENTS



2nd International Symposium on Sweet Potato & Cassava (2ISSC)

14 - 17 June, 2005

Nikko Hotel

Kuala Lumpur, Malaysia

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Threshold Effects and Non-Linearities in Growth and Development

11 - 12 May, 2005

Washington, D.C., USA

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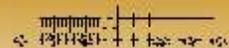
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Article Review

Ekonomi Jagung Indonesia (Corn Economy of Indonesia)

Edited by F. Kasryno, E. Pasandaran, and A.M. Fagi, The IAARD Publication, Jakarta, 2004. ISBN 979-8073-86-X.

This book covers quite comprehensive aspects of the corn economy (written by many authors), in Indonesia. In the first part, this book highlights that the USA will remain dominant in corn production with a share of 41 per cent of world production in 1997, projected to increase to 45 per cent in 2020. This book also reports that the USA has competitive advantage to produce and export corn to all parts of the world. This is made possible by high production efficiency and the provision of all supporting infrastructures.

For Indonesia, without any breakthroughs, corn production will increase from 9.4 million tons in 2000 to 17.2 million tons in 2020. On the other hand, domestic demand is projected to increase from 10.7 million tons to about 18.9 million tons over the same period. Therefore, there will be imports of about more than one million tons every year.

For the last four decades corn production growth was mainly contributed by yield growth, due to the increasing use of high yielding varieties (HYVs) consisting of composites and hybrids. It was also reported that about 89 per cent of corn was grown on dry land and in rain-fed areas with low productivity. Corn production in Indonesia faces problems of drought, water logging, low soil fertility, acidic soil, pest and diseases, seed quality, and poor post-harvest handling.

The yield of HYVs on irrigated lowland and dry land were 6.14 tons and 4.62 tons/ha, with a profit of Rp 2.9 and Rp 2.1 million/ha respectively. On the other hand, subsistence corn farming using local varieties is financially worse with an average yield of 1.65 tons/ha. The main problems faced by corn farmers are high prices of seeds, fertilizers and other chemicals, while the price of corn grain remains low.

This book also reports that corn farming using hybrids is financially profitable. It has comparative and competitive advantages, is efficient, sustainable and resistant to changes in world prices, exchange rates and other risks. This book also concludes that in the next ten years corn demand for feed in Indonesia will be high and continuously increasing. The existing agribusiness system in Indonesia does not support this high demand. Therefore, Indonesia will need to import large amounts of corn. However, world corn demand will also be very high, so that it will be difficult for Indonesia to procure corn from the world market. Consequently, it is difficult for Indonesia to produce livestock products in a competitive manner. Therefore, the Government of Indonesia should encourage better management of agribusinesses by introducing improved

technology and promoting a fair partnership between farmers and feed as well as food industries.

It is reported that the development of corn agribusiness should be supported by strategic and integrative policy. This is dedicated to achieve food security in terms of availability, accessibility, the capacity to overcome harvest failure and sustainability. It could be implemented by restructuring and consolidating local community-based agribusiness, and referring to the regional development approach.

There is a high potential to increase corn production through the improvement of yield, cropping index and reducing yield losses. However, the total factor productivity growth is very low, indicating that there is a lack of policy support in corn-based agribusiness, where farmers did not gain any economic incentive from corn development programmes. Therefore, the authors propose some policy efforts, such as: (i) fertilizer availability, distribution and a competitive price; (ii) development of farm mechanization, infrastructure, labour mobilization and labour welfare improvement, (iii) development of the chicken population and feed industry, and (iv) application of interest rate and exchange rate policy appropriately.

In fact, this book presents very comprehensive aspects of the corn economy in Indonesia, including production and demand, the seed industry, farming systems, post-harvest, marketing, institution, as well as the world corn market. This kind of information is desperately required by many parties such as policy makers, scientists, private companies engaged in agribusiness, farmers and other parties.

However, it would have been useful to find a synthesis connecting one subject to another, so that a clearer figure regarding the corn agribusiness system as well as its competitiveness could be given. Then, this information could be used by policy makers as a basic consideration to design agricultural development, and by scientists to design further research and development planning. In addition, it would be more powerful to convince the readers if there had been clearer tools of analysis regarding the projections of corn supply and demand. The same suggestion is also relevant for the measurement of comparative and competitive advantages ■

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