



CGPRT

Volume 2, No. 3 March 2004

Flash

ISSN

1693-4636



Short Article

Increasing Income with Soybean Organic Farming

As consumers are becoming increasingly concerned not only with their health but also with the environment, the market for organic farming is reported to be growing rapidly. According to Yusefi and Mitschke (2003), organic farming has been increasing rapidly in the last decade. Almost 23 million hectares of area are managed organically worldwide.

As an illustration, while the world's total organic market for 2000 was around US\$ 16 billion, it increased to about US\$ 19 billion in 2001. The market in the United Kingdom increased by more than one third in 2000/2001 according to a Soil Association report, while it increased by up to 15 per cent in 2001/2002. In Asia, particularly Japan, the market for "green products", including organic food, was estimated at US\$ 2-2.5 billion. As defined by JAS, the Japanese market for certified organic food was US\$ 250 million maximum in 2000. Retail sales were estimated to reach US\$ 350-450 million in 2003 with the long term potential being much greater.

Organic farming aims to create a farming system that is sustainable through practices that avoid or largely exclude the use of synthetically compounded fertilizers and pesticides. To the maximum extent feasible, organic farming systems rely upon crop rotation, crop residues, animal manures, legumes, green manures, off-farm organic wastes, mechanical cultivation, mineral-bearing rocks, and aspects of biological pest control to maintain soil productivity, to supply plant nutrients, and to control insects, weeds and other pests. Also, they do not use genetically modified organisms or GMO's.

Soybeans are relatively easy to produce using organic methods. However, it is important to recognize that organic farms rarely focus on a single crop. Organic soybeans are best grown in rotation with several other crops that (ideally) complement or compensate one another. Market premiums are a significant motivating factor for transitioning to organic production. In the US, the market for organic soybeans has appeared especially attractive. Farm gate prices for cleaned 'Vinton' organic soybeans ranged from US\$ 17 to US\$ 20 per bushel during most of the first quarter of 2002. During that same period, clear-hilum soybean prices ranged from US\$ 11 to US\$ 14, while conventional prices are about US\$ 5.25 (Frerich, 2003)

The development of soybean organic farming has begun in the USA. Production practices are carried out on over 70,000 of the 1.8 million farms in the U.S. today. Experience has indicated that organic soybean yields are usually comparable to those obtained under conventional management. Legume hay yields might also be comparable to conventional yields, though less information exists to confirm this. Often, however, organic production costs are lower and cancel out lost revenues due to yield reduction, even when organic crops are marketed through conventional channels (Frerich, 2003).

A simple partial budget analysis indicates that soybean organic farming is more profitable compared to conventional soybean farming. Although the total cost of organic farming (US\$ 104/acre) is higher than that of conventional farming (US\$ 96/acre), its higher price causes the total gross margin to be much higher so that total added value, in turn, becomes higher. The total gross margin gained from GMO soybean is around US\$ 161.25/acre, while that of organic soybean is around US\$ 386 (Frerich, 2003).

Soybean organic farming could be an alternative to increase the income of farmers in Asia. Technically, the practices of organic farming, i.e. rarely focusing on a single crop, are common practices in less developed countries, such as in Asian countries. Soybean cultivation in Asia is a part of a crop rotation system to optimize the use of land and to reduce technical and market risks. Lack of capital and the relatively high prices of fertilizer and pesticides increase the opportunity of organic farming practices in developing countries, such as in Asia and the Pacific region. This condition is expected to attract poor farmers to practice soybean organic farming. To realize this, poor farmers have to increase their capacity in organic farming and to access the market of soybean organic farming ■

Rewrite by Wayan R. Susila, CGPRT Centre, Bogor, Indonesia.

(References available upon request)

FlashBREAKING



Trust Fund for World's Poorest Countries

The World Bank created a \$ 25 million Trust Fund to strengthen institutions, support early efforts at policy reform and build capacity for social service delivery in the world's poorest countries. These countries, collectively known as Low Income Countries Under Stress (LICUS), are characterized by very weak institutions and governance, and constitute the most difficult environments in which to use aid effectively. The Bank's LICUS initiative aims to support selective basic governance reforms and innovative mechanisms for social service delivery. The Trust Fund will be financed by transferring funds from the Bank's surplus for FY03 and will operate until the end of 2007.

World Bank, 2004. World Bank Establishes Trust Fund for World's Poorest Countries, Washington, D.C., Press Release (15 January 2004).

Improving Diet and Health with Yacon

Yacon - the root of a tall, leafy plant with tiny yellow sunflowers originated from Latin America. It is a tasty root which scientists say has the potential to safeguard against cancer, helps the absorption of calcium and vitamins and can lessen the blood sugar peaks from eating sweet food that are a problem for diabetics. Although it has little visual appeal - yacon has dark brown skin and looks like an elongated potato - its super food status has turned it into a promising natural health food. Yacon is naturally low-calorie - a jar of yacon syrup contains half the calories as a same-sized jar of honey - and its sugar does not raise blood glucose levels.

Webber, J., 2003. Root from Peru Holds Hope for Dieters, Diabetics. Reuters (25 November 2003).

High Transit Costs Impeding Trade of Developing Countries

The cost of moving goods across international borders is often as important as formal trade barriers in determining the cost of landed goods and ultimately of market share. High transit costs in developing countries have impeded the trade volume of these countries. In developing countries, transit costs are routinely two to four times higher than in rich countries. Every day spent in customs adds nearly 1 per cent to the cost of goods.

World Bank, 2003. Global Economic Prospects, Realizing the Development Promise of the Doha Agenda.

Indonesia Hits a Record in Maize Yield and Production

The year 2003 could be perceived as an achievement in Indonesian maize yield and production. During 1968-2002, the average yield of maize in Indonesia was less than 3.0 tons/ha. In 2003, Indonesia for the first time achieved a yield of more than 3 tons/ha (3.2 tons/ha). Similarly, maize production in 2003 hit a record at 10.82 million tons. Since 1968, maximum annual production was 10.17 million tons, achieved in 1998.

Sinar Tani, 2003. Menjadikan Jagung Sebagai Komoditi Unggulan (12-18 November 2003).

Poverty, Growth and Globalization

Over two decades ending in the late 1990s, 24 developing countries that increased their integration into the world economy achieved higher growth in incomes, longer life expectancy and better schooling. These countries, home to some 3 billion people, enjoyed an average 5 per cent growth rate in income per capita in the 1990s compared to 2 per cent in rich countries. Many of these countries -such as China, India, Hungary and Mexico- have adopted domestic policies and institutions that have enabled people to take advantage of global markets and have thus sharply increased the share of trade in their GDP. People in these integrating countries saw their wages rise, and the number of people in poverty decline. However, not all countries have integrated successfully into the global economy since some 2 billion people particularly in sub-Saharan Africa, the Middle East, and the former Soviet Union live in countries that are being left behind. On average, these economies have contracted, poverty has risen, and education levels have risen less rapidly than in the more globalized countries.

To help all developing countries to take better advantage of the benefits of globalization while managing the risks, a seven-point plan is proposed. It calls on poor countries to improve their investment climates and put in place better social protection to support poor people in adapting to and taking advantage of opportunities in a changing economic environment. It also calls upon rich countries to open their markets to exports from developing countries and to slash their large agricultural subsidies, which undercut poor countries' exports. Moreover, a substantial increase in development assistance, particularly to address problems in education and health, is also required ■

Based on World Bank, 2004. Globalization, Growth and Poverty: Building an Inclusive World Economy, News Release (No:2004/208/S).

Child Malnutrition Can Be Reduced

By 2050, the percentage of the world's children who are malnourished could drop dramatically from the current 31 per cent to 11 per cent, if policymakers respond to the global challenge of hunger progressively. Progressive policy actions that are needed include (i) increasing public spending on agricultural and rural development by both developing and industrialized countries; (ii) expanding investment in agricultural research; (iii) higher levels of investment in education, social services and health; and (iv) improving irrigation efficiency. The progressive policy scenario projects that after 2015 child nutrition will improve steadily in all developing regions of the world, including sub-Saharan Africa and that Latin America, the Middle East, and China will virtually eliminate child malnutrition by 2030. If, however, the governments fail to respond to the problems, pessimistic scenarios would prevail leaving 135-140 million children malnourished in 2025 ■

Based on IFPRI, 2003. World Food Situation: IFPRI Analysis, CGIARNEWS (November 2003).

Reducing Poverty through Increasing Cassava Productivity

Rural poverty in Lampung, Southern Sumatra, is partly caused by the low productivity of cassava in the region. Cassava productivity is around 12 tons per ha, far below the productivity achieved in India of 23.2 tons per ha. To overcome this problem, three engineers have developed a new cultivation technique, called intensive culture. Based on preliminary results of their experiments using the Aldira Plus variety, this technique can increase productivity to attain around 120 tons per ha. The investment cost of this technique (first year plantation) is around Rp 12.7 million per ha and variable costs are roughly Rp 5.4 million per ha. Farm income is projected to reach around Rp 7 million per ha per year. Within a 3.6 year time horizon, the internal rate of return (IRR) of this technique was estimated at around 68 per cent, indicating that this technique is financially feasible. Moreover, the experiments have also involved poor farmers organized into farmer groups. The farmer groups have increased their capacity not only on technical aspects, but also on farmer organization and market access. This also means that the adoption of this technique by smallholders could increase their income and therefore reduce poverty in the region ■

Based on Mulia, Arsyid, 2004. Indonesian Unemployment, Poverty, and the Role of Cassava, Pusat Data Bisnis Indonesia, Jakarta.

Can a Crop of the Poor Become a Source of Welfare in Nepal?

In Nepal, finger millet is the fourth cereal crop after rice, maize and wheat in terms of total area and production. It is a rich source of calcium, iron and phosphorous with a great nourishing capacity, especially for hill farmers who usually suffer from food deficiency in their diet. Finger millet has medicinal value for people suffering from diabetes (Prasad and Mandal, 2003). Finger millet is mainly consumed in the form of bread and porridge, whereas a substantial portion of the total production in the country is used for the preparation of an alcoholic drink, called Tumba. An issue has been raised in the country questioning the government's restrictions on home made alcohol, since a huge amount of the grain is utilized for household brewing. Experts have pointed out the importance of the traditional food culture of Nepal and expressed the possibility of exporting Tumba, if properly packaged to other countries. There is good scope to increase the market demand of finger millet by preparing different types of recipes such as noodles, bread, doughnuts, cakes, biscuits, cookies and others. Olatunzi *et.al.* (1992) reported that millet flour is particularly suitable for making cakes. Industrialization for manufacturing value added products, quality alcohol and livestock feed stuffs is imperative to increase the area and productivity of finger millet ■

Based on Shrestha, H. K., 2004. Status and Scope of Finger Millet in Nepal, Nepal Agricultural Research Council.

FlashEVENT



9th International Barley Genetics Symposium

20 - 26 June, 2004
Brno Trade Fairs
Brno, Czech Republic

Contact:

Lenka Nedomova
IBGS 2004 Secretariat
Agricultural Research Institute Kromeriz Ltd.
Havlickova 2787
CZ - 767 01 Kromeriz
Czech Republic
Phone: +420 573 317 166
Fax: +420 573 339 725
Email: ibgs@vukrom.cz
www.vukrom.com

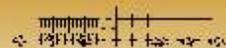
Reducing Poverty and Sustaining Growth Conference

26 - 28 May, 2004
Shanghai, China

Contact:

Blanca Moreno-Dodson
Tel: (202)-458-8047
Fax: (202) 522-0401
Email: bmorenododson@worldbank.org

Kim Cuenco
Tel: (202)-458-9107
Fax: (202) 522-0401
Email: Kcuenco@worldbank.org



UNESCAP CGPRT Centre

Jl. Merdeka 145

Bogor 16111, INDONESIA

Phone : (62-251) 356813, 343277

Fax : (62-251) 336290

Email : cgprt@cbn.net.id

www.cgprt.org



EDITORIAL COMMITTEE Nobuyoshi Maeno

Erna M. Lokollo

Robin Bourgeois

Tomohide Sugino

Wayan Reda Susila

EDITOR Matt Burrows

PRODUCTION Agustina Mardiyanti

DISTRIBUTION Fetty Prihastini

PRINTER SMK Grafika Desa Putra

LAYOUT DESIGN Fransisca A. Wijaya

EDITORIAL Flash CONTACT

Book Review

Is Export-led Growth Passe? Implications for Developing Asia

Felipe, Jesus, ERD (Economics and Research Department) Working Paper Series No. 48

Published and printed by Asian Development Bank, December 2003

Through the analysis of the East Asian financial crisis in the late 1990's, some researchers have recently begun questioning the export-led growth (ELG) strategy that some Asian countries followed and that yielded impressive results. The argument of these researchers is that it is doomed to fail due to global demand constraints. They say it is like a kind of zero-sum game if all countries follow on export oriented economy. This is the reason why it is important to discuss whether Asian countries can still rely on the ELG strategy, or whether they should start shifting from ELG to domestic demand-led growth (DDLG).

This book approached the question by summarizing the main concepts of ELG strategy and the rationale behind countries' preferences for ELG, rather than DDLG. It concluded the ELG strategy is conceived since it allows countries to grow and generate trade surpluses and employment without generating inflation, though there must be trading partners willing to accept not only trade deficits but also imported inflation.

The book then proposes to look at the ELG strategy from "a Keynesian point of view" to know important insights and up-to-date policy recommendations for developing countries. If a country is able to expand demand up to the level of existing capacity, without the balance of payment (BOP) difficulties, the pressure of demand upon capacity may well raise the capacity growth rate. This virtuous circle can be achieved through the encouragement of investment, technological progress, the supply of labor and moving factors from low productivity sectors to high productivity sectors.

The book concludes that the distinction, ELG versus DDLG, is meaningless because Asian countries need some form of ELG to attain economies of scale. It also concludes that both strategies need not be mutually exclusive. There is a question whether Asian countries can today generate enough domestic demand-led growth so as to shift from export growth.

The answer is negative for most countries, because income levels are still too low to increase private consumption levels. A shift toward domestic orientation will require significant internal changes that will take time. The discussion of the policies to resume growth in the region has to be framed in a more general context of what is constraining growth today. In the author's view, demand is the most important factor of growth constraints.

In the context of this book, I want to focus the dual character of CGPRT crop contribution to poverty alleviation. One of the features is that CGPRT crops are produced and consumed as staple foods especially in marginal areas. Another one is their high potential as raw materials for industrial use. This use varies from traditional food processing to technology intensive products like biodegradable plastics, bio-fuels and functional components for medical purposes (Iso-flavone in soybean, anthocyanin in sweet potato etc.). If the expansion of demand is the crucial factor of economic growth, CGPRT crops can find a niche in the new development paradigm because of their broad channel for consumption which is attractive both in developing and developed regions. The discussion in this book provides us some useful implications to consider rural development strategies which are characterized by CGPRT crop based rural economies ■

Reviewed by Tomohide Sugino, Project Leader, AGRIDIV Project, CGPRT Centre, Bogor, Indonesia.