

	<p style="text-align: right;">Date : 18/06/2007</p> <p><b>Impact of Globalization on Small Farmers Worldwide: Implications on Information Transfer</b></p> <p><b>Dr. Deva Eswara Reddy</b>  Associate Professor  Texas A&amp;M University  College Station, Texas, 77843  USA  dereddy@tamu.edu</p>
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## Abstract

*Globalization can be viewed as the integration of inputs and outputs into global markets, sharing of information and knowledge, and promulgation of rules governing such integration. World Trade Organization, International Monetary Fund, and World Bank play a vital role in the process of economic globalization. The positive and negative affects of globalization and the groups that resist and support globalization are many. Some of the impacts of globalization can be seen on small farmers in developed and developing countries. Corporate globalization has impacted the rural communities in several ways. This paper presents impacts globalization on small farmers and mentions implications of these impacts on information transfer to small farmers.*

## Introduction

Globalization is a hackneyed word and it means different things to different people.” To “globalize,” according to Webster’s Dictionary, means “to make worldwide in scope or application. Globalization can be viewed as the integration of inputs and outputs into global markets, sharing of information and knowledge, and promulgation of rules governing such integration. For some people globalization is primarily a synonym for global business. Theodore Levitt (1983) first used the word globalization in an article ‘Globalization of markets’ published in Harvard Business Review. The positive and negative affects of globalization and the groups that resist and support

globalization are many. The World Bank report by Paul Collier and David Dollar (2001) says that although globalization presents considerable opportunities for developing countries, it also contains significant risks. Associated with international integration are concerns about increasing inequality, shifting power, and cultural uniformity. Some of the intense impacts of globalization can be seen on small farmers and rural communities, both in developed and developing countries. While some people champion the arrival of globalization, such optimism hides the negative impacts that accompany what should more appropriately be called corporate globalization. Corporate globalization affects both rural and urban areas, but its impacts on rural communities are diverse and profound (Jennifer Sumner, 2001).

## **Prime Movers of Globalization**

The World Trade Organization (WTO) is the international organization dealing with the rules of trade between nations. General Agreement on Tariffs and Trade (GATT) functions as the foundation of the WTO trading system, and remains in force. As in January 2007, 150 countries are members of the WTO. In becoming Members of the WTO, these countries undertake to adhere to the 18 specific agreements. Of these agreements, Trade-Related Aspects of Intellectual Property Rights (TRIPS) appears to have greatest impact. The World Bank and the International Monetary Fund (IMF) play a vital role in the process of economic globalization.

## **Impact of Globalization on Farmers**

Recent years have witnessed a marked acceleration in the tempo of globalization. Its scope has also widened beyond the realm of economy to embrace the domains of social, cultural and political norms and practices. This powerful thrust has been associated with far-reaching consequences for economic well-being (Dharam Ghai, 1997). In the case of agriculture, globalization demands export oriented cash crop farming, free trade, discouragement of subsidies, insistence on standards, and enforcement of intellectual property rights. Globalization envisaged food security to help augmenting availability of food grains, trade to bring about flexibility in the matter of food security, increased access to food by the poor, increase employment opportunities, and cash crops to earn foreign exchange. What has happened is quite contradictory to these expectations. Globalization has resulted in the decline of household subsistence production. People look for greener pastures in other countries as laborers. Rural demographics are changing. While men leave, women are forced to reduce farming. As we notice often in the press despair has led more than 17,000 Indian farmers to commit suicide in 2003 as was reported in New York Times on September 19, 2006. An Inter Press Service story quotes that as many as 100,000 farmers committed suicide between 1993 and 2003.

Vandana Shiva (2000), a staunch supporter of small farmers, says that economic globalization is leading to a concentration of the seed industry, the increased use of pesticides, and finally increased debt. In the regions where industrial agriculture has been introduced through globalization, higher costs are making it virtually impossible for small farmers to survive.

## **Seed Saving**

Farmers who have been growing seed for generations now face legal barriers. It is said that up to 1.4 billion people in developing countries depend on farm-saved seeds as the primary seed source. Genetic engineers are building on the accumulated success of generations of farmers who have selected and improved seeds for thousands of years, whereas the private companies claim that they should have exclusive patent rights. For decades, public research institutions trained farmers and were the centers of agricultural research. About 45% of U.S. plant breeders at universities said that they have trouble getting seed from private companies, which places serious constraints on their research (Pollack, 2001).

Farmers who traditionally grew pulses, millets, and paddy have been lured by seed companies. Their native seeds have been displaced with new hybrids which cannot be saved and need to be purchased every season at a high cost. Hybrids are also very vulnerable to pest attacks. Spending on pesticides in some countries has increased 2,000 per cent. Now farmers are consuming the same pesticides as a way of killing themselves so that they can escape permanently from unpaid debts. Green revolution was a technological solution for food challenges when the Nobel laureate Norman Borlaug brought dwarf variety of wheat and explored in South Asia. But now the hybrid seed by transnational companies have put the people at risk of their lives. Agriculture is a living in developing countries while it is a business in developed countries. 45 % of the people live dollar a day. Dollar is not for one person but for the entire family. One bushel of corn costs less than \$4 while a bushel of corn flakes are sold at \$133. Farmers are making too little while others are taking too much. Farmers earn less and consumers pay more. Private companies often have little incentive to service subsistence farmers and public sector has no workforce to fill the gap

## **Protective Subsidies**

Protective subsidies are given in industrial countries while other WTO member countries are discouraged. In some countries zero tariffs are imposed. United States gives over \$18 billion a year in subsidies to its own farmers. This has affected prices of cotton for farmers in other countries. Farmers in developed countries receive subsidies for not growing corn and for not raising hogs.

## **Lack of Markets**

Farmers lack access to overseas markets, where they can sell their products at higher prices and purchase cheaper inputs and better technology. They also lack sufficient access to local markets and face unfair competition from subsidized imports. Inputs and outputs are controlled by multinational companies. Controlling both the inputs and the marketing of commodities jeopardizes farmers' existence. Trade regulations, adjusting to the rules that govern international trade, food safety standards have affected the small farmers very much.

## **Rise of Supermarkets**

Rise of Supermarkets in Africa, Asia, and Latin America have a direct impact on local retailers and on the lives of millions of small farmers (Reardon et al 2003).

## **Weather Vagaries and Cash-crops**

Drought and weather vagaries affect much. Deep drilling tube wells have no water. Millions face water famine. It is man-made due to mining of scarce ground water for cash crops for export. Power is supplied hardly 6-7 hours a day.

## **Protesters against Globalization**

Despite all these hassles most protestors against globalization are from industrialized countries. They include labor organizations worried about loss of jobs moving to south, US farmers defend to support agriculture, and radicals from European Union countries opposed to corporate capitalism. In fact few protesters come from poor of the world and most are representatives of NGOs. Bill Christison (2000) says that family sized farmers in US are in the verge of forcing off the land and getting displaced and ethnic minority are declining. While the farmer growing cereal grains such as wheat, oats, corn earn negative returns and pushed to closed to bankruptcy, the companies that make breakfast cereals make huge profits.

## **Beneficiaries of Globalization**

Several studies have indicated that in many developing countries, freer trade, better communication, and more rapid movement of goods and technology have raised living standards and reduced poverty but benefits accrued mainly in urban areas. Farmers in general and small farmers in particular are least benefited. In developing countries large farmers appears to be taking advantage of reaping the benefits of agricultural markets of developed countries. With their economic and political influence, they are able to get best technologies from research stations, grow cash crops, negotiate agreements, and move their products. On the other hand the small farmers are hand to mouth farmers feeding their families with meager produce they yield (Kumar Venkat, 2003).

## **Public Sector Research**

In many developing countries deep cuts in government budgets have led to a scaling back of public sector research. National as well as international agricultural research programs continue to focus on boosting the yields of traditional food products. Inadequate resources are devoted to crops that can help farmers enter the cash economy. Not much research on small-scale farmers. There is every need to develop strategies that can respond quickly and efficiently the problems of globalization. Globalization serves breakdown borders in markets results in cultural interaction, ability of capital and services to act freely globally .But the political basis remains local. Unless local aspects are balanced in a democratic way the problems will remain as they are.

## **Agricultural Information System**

The agricultural information transfer system consists of four independent, interrelated components: development, documentation, dissemination, and diffusion of information. These components broadly correspond to generation, organization, communication, and utilization of information. The participants in this model facilitate interaction, networking, feedback and collaboration by serving each other in a dynamic dual function as both a resource base and a customer base (Reddy, 2005). Achleitner (1995) defined information transfer as creation, dissemination, organization, diffusion, and use of information. Shand (2001) is of the opinion that giant transnational enterprises are gaining control over all aspects of commercial food, farming and health services.

The dominant companies in plant breeding, pesticides, veterinary medicine and pharmaceuticals are known as "gene giants." Patenting genes, genetic traits and enabling technologies, legally restricts access to new agricultural biotechnologies. By the end of 1998, the U.S. Patent and Trademark Office had granted 1370 biotech patents to the top 30 patent assignees, 74% of which were held by six gene-giants: Monsanto, Dupont, Syngenta, Dow and Grupo Pulsar (Graff, 2002).

Only 12% of corporate research focuses on farm level technologies. In contrast, 80% of public research is oriented to the farmer. By and large, corporate breeders are interested in industrial crop commodities such as soybeans, maize, cotton and canola, not in subsistence agriculture. On average, developing countries devote only 7.5% of total government spending to agriculture and less than one third goes toward research (Paarlberg, 2000).

Annual foreign aid to agriculture in poor countries has been gradually reduced. Measured in U.S. dollars, the aid fell by 57% between 1988 and 1996, from \$9.24 billion down to just \$4.0 billion (Alston, Pardey, and Rosebloom, 1998). With the decline of public sector research, who will address the needs of poor farmers, global food security, and environment? Shand (2001) asks.

While the Consultative Group on International Agricultural Research (CGIAR) has a mandate for major food crops, several commodity crops not fully covered by the CGIAR mandate are very important to humankind. Some of these crops are essential for direct contribution to food security at the local and regional level, while others play a significant role in poverty alleviation and rural economies (Frison, 1999). Information services pertinent to such crops become crucial. Information service includes not only providing bibliographic information, but also service on demand by farmers. Who can do this? It has to be the specialists who reach out to the farmers. This is where the role of the extension service can have an impact, as there has been an apparent shift in research towards to non CG-mandate crops.

## **Implications on Information Transfer**

In order to take advantage of niche markets, farmers need know what products are needed, including specific quality traits or attributes. Second, they need to know whether they have an inherent comparative advantage in producing these products in relation to other potential suppliers. Third, they need to learn the most efficient and

effective means of supplying these niche markets. Fourth, they may need to achieve economies of scale by getting organized into some type of marketing alliance or to work through an existing cooperative so they can provide processors or consumers with a consistent supply of high quality product. Public research and extension can play a more active role in assisting farmers to participate more effectively in this emerging global economy (Swanson. et al).

- Privatization of information leads to less reliance on Extension and more dependence on private technical consultants.
- Obviously, this service will be out-of reach for most small farmers in developing countries
- Impartiality of fertilizer and pesticide recommendations made by private sector consultants could be at stake.
- Lack of public sector access to information internalized by individuals and firms will curtail the ability to conduct resource inventories, detect market failures, and undertake policy analysis.
- Enhanced market development of analytic and diagnostic services, such as soil testing, integrated pest management, animal health, and technologies for fertilizer, pesticide, and water inputs will likely speed farm-level adoption
- Fewer farms with a concentration of assets will enjoy differential access to 'world-class-information,' leading to a geographical concentration of production in areas where the information infrastructure is well developed.

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