Chapter 7

Globalization and Its Impact on Indian Food Security
What is Globalization?

Globalization means "the multiplication and intensification of economic, political, cultural, and environmental linkages, between people, organizations, and nations. As a result of process of globalization there is increasing tendencies towards universal application of economic, institutional, legal, political, and cultural practices and the presence of significant global spillover from the behavior of individuals and societies. Globalization is influencing trading patterns, capital flows, resource allocations, and market structures" (Bonila and Robinson, 2001).

In common usage, the notion of globalization encompasses a wide range of phenomena from economic activities to the internationalization of (mainly Northern) culture, education, technology and tastes. Globalization refers both to the integration of production facilities in different countries under the aegis or ownership of the multinational corporations and the integration of product and financial markets facilitated by liberalization (South Center, 1996).

Trade liberalization is a process of systematically reducing and eventually eliminating all tariff and non-tariff barriers between countries as trading partners. It builds on the theory of comparative advantage in a free market, which holds that countries will benefit more if they focus their resources on sectors in which they have some sort of advantage and that the free market is the best mechanism for ensuring the optimal allocation of resources. The wealth generated as a result will benefit the economy as a whole. The theory has nothing to say about winners and losers within national economies. (Modeley and
For developing countries in general and India in particular. The central elements for selecting proper road are provided by the agricultural sector. Under a more market-driven economic policy framework, agriculture is capable of facilitating trade expansion and GDP growth, while also helping to generate incomes and job for the poorest part of the population, facilitate more appropriate land and natural resources practices, and provide broader social benefits within an increasingly decentralized political framework. However, because of the deep-rooted legacy of old paradigm based on import substitution, fundamental institutional adjustment and structural changes will be required before agriculture can respond fully to the new opportunities. Thus, the role of agriculture in the new global order must be central if broad-based growth is to occur.

A dynamic agricultural sector seeks to expand, in a cost effective and risk reducing way, linkages with input supply, post-harvest processing and handling, distribution and manufacturing in order to maximize broad-based economic opportunities. The overall agricultural environment must be conducive to the changing requirements of producers and rural residents as they respond to the needs of increasingly distant consumers and competitive producers and agribusiness. These shifts must also embrace the increasingly complex environmental issues effecting natural management and public health. Thus, there is need of critical, mutually supportive elements considered essential for government to respond adequately to changing time.
Globalization, Poverty, Food Security and Agriculture; Linking the Pieces

Globalization may change the use, and relative value of the economic assets and capabilities of the poor. It may also have an impact on non-economic assets and capabilities, such as social capital (civil contacts, networks, and institutions) and political processes that determine the participation and empowerment of the poor.

The food and agriculture in developing country is inseparable from the rest of national economy and the world market. Changes in world markets affect national economic growth, and change in non-food policies affect the performance of food sectors. No country grows everything it wants or needs to eat so trade is an integral part of the quest for food security. How international trade structured, how macroeconomic policies position agriculture within a national economy and that national economy within the global markets system these have always been critical questions for reducing hunger but they have become more important as globalization accelerates. The transformation of rural economies from subsistence to commercial and national economies from closed to open can create hardship for many. Guiding this transformation and its accompanying development of market and supporting infrastructure and institutions is critical. How to guide these transformations so that they can best contribute to agricultural growth, poverty alleviation and food security is critical (IFPRI, 2001).

Food and agricultural framework in developing countries connect with the rest of the economy and with the world through a network of markets. Changes in world market directly affect national economies and changes in domestic nonfood policies indirectly
affect food sectors.

The outline framework linking globalization, agriculture, poverty, and food security is presented in the figure 1. Different dimensions of globalization are listed at the top (first level) and are shown as affecting the government, civil society, markets, and environment in developing countries (second level). For instance globalization may influence the autonomy of government policies and availability of public resources. It may affect the cultures and values while allowing new cross country alliances in civil society. It may change the actors in and the structure of markets domestically and internationally and may lead to larger environmental spillovers. In turn, these changes have implications for different sectors: agriculture/industrial, rural/urban, food/non-food (third level). Finally, the different dimensions of globalization affect poverty through their impact on economic and non-economic assets and capabilities, mechanisms for the redistribution of income, and institutional factors (fourth level).
Figure 1: The Links Between Globalization, Poverty & Food Security.

**GLOBAL CHANGES**
- Trade
- Capital Flow, Foreign Investment
- Technology
- Labor and Population
- Politics, Governance, and Civil Society
- Legal, Institutional, and Regulatory Issues
- Environment
- Culture and Society
- War and Violence

**Interactions**
- Homogenization
- Spillovers

**Government Policies and Operations**
- Markets for products, Factors, Assets, and Knowledge/Technology
- Civil Society, Political system, Legal System

**Environment and Natural Resources**
- Environment and Natural Resources

**Nonfood, Non-rural, and Non-agricultural dimensions**
- Nonfood, Non-rural, and Non-agricultural dimensions

**Food, Rural, and Agricultural dimensions**
- Food, Rural, and Agricultural dimensions

**Household/Individual**
- Labor/Human capital and private assets. Access to public assets and public goods/service; taxes and transfers. Income, savings, and consumption
- Risk and vulnerability
- Voices, participation, and empowerment
- Role of women and gender issues

**Poverty, food security, nutrition**

Present Liberalization in Historical Perspective:

The processes of liberalization and globalization have occurred at different speeds and to varying extents in different regions and countries following the Second World War. In order to comprehend the magnitude of the changes under way, an overview and comparison of the overarching economic systems of 1950 to 1970s and the 1990s is necessary. This is a story of paradigm shift, where government-led economic growth through the 1970s gave way to the increasingly market-led growth we see now. The centerpiece of the new paradigm is the rapid global shift from closed, nationally focused markets (protected and subsidized) to open, global markets (competitive and less subsidized).

Advanced Countries:

In the world economy following the Second World War, these processes have occurred at different speeds and to varying extents in different regions and countries. Both liberalization of trade and freedom of capital movements have been implemented to the greatest degree in advanced economies. Trade in manufacturing products among these countries was liberalized gradually over the whole of the post-war period through successive rounds of international trade negotiations (up to and including the Uruguay Round). By the mid-1970s, at the conclusion of the Tokyo Round, the weighted average tariff on manufactured products traded among industrial countries was only 6.5 per cent, compared with 10 per cent before the Round. In 1990, this figure was down to 5 per cent.

The liberalization of capital movements among advanced economies has also occurred in
stages, but in somewhat different ways than the deregulation of foreign trade. In many respects capital market liberalization between these countries has gone further than trade liberalization. Most of these economies achieved current account convertibility in the late 1950s. However, capital account convertibility in leading industrial countries took place only in the 1970s in, for example, the United States, Canada, UK and Germany and in 1980 in Japan.

France and Italy introduced capital account convertibility only in 1990. Capital account convertibility in the advanced countries came in the wake of the collapse of the Bretton Woods fixed exchange rate system. It was preceded by the liberalization of domestic financial markets in these countries. These were important steps in the integration of international financial markets, which many in the financial world regard as being synonymous with globalization. (The integration of markets refers to the fact that the various national markets for a product or financial service become in effect one single international market.) The foreign exchange market was the first financial market to globalize in the mid-1970s; it is the biggest and perhaps the only truly global financial market. The integration of stock markets occurred later still with the deregulation of domestic stock markets in leading countries. A notable example of this was the so-called "Big Bang" in London in the mid-1980s, involving the simultaneous abolition of a large number of the rules and regulations which traditionally had governed the conduct of members of the stock market and the criteria for membership.

Liberalization has been much less evident with respect to flows of labor between countries. Moreover, unlike trade and capital movements, over time there has been
retrogression in this sphere in many industrial countries. Nevertheless, it is important to appreciate that, as a part of the process of privatization, deregulation and market ascendancy in general, in the post-1980 period there has been a considerable relaxation in the domestic rules and regulations maintaining labor standards, minimum wages and labor rights. The European country, which has gone furthest in this direction, is the United Kingdom.

Developing Countries:

Compared with the situation in advanced industrial countries, both globalization and liberalization have occurred at a slower pace in developing countries. An outstanding feature of the post-1945 international economic arrangements was the special and differential treatment accorded to developing countries in recognition of their economic backwardness. This apparent altruism was very much the product of the Cold War and contention between the two economic and political systems liberal capitalism represented by the United States and the state-planning system of the former USSR (Glyn, Hughes, Lipietz and Singh, 1990). In the face of pressures from the G-77 following the creation of UNCTAD, "non-reciprocity" in trade relations was accepted in the GATT by industrial countries, whereby they agreed to provide comparatively easier preferential access to their markets for developing country goods (those under the Multi-Fibre Arrangement were an important exception), whilst permitting developing countries to impose tariffs on advanced country products.

The Uruguay Round Agreements and the establishment of the World Trade Organization
(WTO) greatly reduce the scope of this concession and they reflect the changed world political situation following the end of the Cold War. The efforts by the North to engage the South in negotiations on trade and trade-related matters represented the North's efforts to respond to Southern competition by demanding greater reciprocity as well as other measures that would further pressurize the North's economic interests.

However, even before the Uruguay Round Agreements came into force, many developing countries had begun in the 1980s to reduce their tariff barriers. The impetus for these reforms emanated from two interrelated sources. First, they were an integral part of the new policies of the multilateral financial institutions, particularly the World Bank, whose structural adjustment lending programs were conditional on economy wide policy reforms in developing countries, including trade, foreign investment and financial sector reforms. Secondly, the economic failure and the "lost decade" of the 1980s (largely due to the debt crisis) in Latin America and sub-Saharan Africa obliged many countries to accept these conditionalties, as well as similar ones imposed by the International Monetary Fund (IMF). According to the World Bank (1990), which reviewed the structural conditionality for loans made during the period 1980-1987, nearly 80 per cent of loans required trade policy reform and nearly 40 per cent liberalizing reforms of the financial sector. This is not to suggest that some countries did not introduce these reforms under their own initiative, ascribing their recent economic failure to their former dirigisme and relatively closed economic regimes.

Thus, for example, Mexico reversed its successful import substitution of the previous four decades and acceded to GATT in 1986, reducing its tariffs to an average of 11 per
cent by 1988. (Rodrik, 1992.) Other Latin American countries also turned to neoliberal policies, attributing their economic failure to their past policies of dirigisme and import substitution rather than to the external shocks over which they had no control. However, dirigisme and import substitution were also practiced by the highly successful East Asian economies.

Similarly, in the 1980s and the 1990s many countries have greatly liberalized their foreign investment regimes, as well as reduced their controls over capital movements. Also, despite their doubtful merits for economic development (Stiglitz, 1994), stock markets have been established or expanded as part of financial sector reforms around the globe, even in the poorest countries. Such markets have been used in many countries to facilitate privatization, attracting in the process substantial foreign portfolio capital. This, of course, involved changes in long standing policies against foreign ownership.

There is, however, an important difference between the trade and financial policy reforms carried out by the "unsuccessful" economies such as those in Latin America and the "successful" ones in Asia in the recent period. Countries in the two regions have carried out many similar reforms, but the process in Asia has been voluntary, gradual and guided whereas in Latin America it has usually been forced on them by the debt crisis and World Bank and IMF conditionalities, and these reforms have usually been introduced in a precipitate and wholesale fashion.

Despite the widespread implementation of trade policy reforms in developing countries since 1980, it is significant that the extent of trade liberalization implemented by most of
these countries is still quite limited.

To sum up, liberalization and globalization both in industrial and in developing countries have been cumulative and uneven processes extending over many years. But even industrial countries have a long way to go before they can be regarded as being fully liberal in the ideal neoclassical sense, that is, that firms' decisions no longer need to take into account national boundaries and that rates of return to factors of production are equal world-wide, subject only to differences in transportation costs and degrees of risk.

Nevertheless, at a practical level, with respect to trade in manufactures and capital movements between leading industrial countries, there can be deemed to have been more or less free trade and capital movements in the last ten to fifteen years. This is especially so, not only in comparison with the developing countries but also, more importantly, in comparison with the situation in these economies themselves in the 1950s and 1960s. During these earlier decades most countries not only enforced international capital controls under the Bretton Woods regime, but their domestic product, capital and labor markets were also subject to a wide range of rules and regulations in keeping with economic and social objectives.

**Liberalization, Poverty, Agriculture and Food Security: A Review of Case Studies**

Liberalizing agriculture markets can encourage agriculture-led economic growth in developing countries, many of which have experienced higher levels of input use, increased production, expanding exports, and higher incomes as a result of more open markets. But countries moving toward a commercial, market-oriented economy face a
complex task. Without oversight, ineffective policies, weak institutions, and inadequate infrastructure can create market inefficiencies. Liberalization can result in dramatic changes in products, income distribution and labor in ways that may harm the poor. The transformation of the rural economy can cause hardship for smaller farmers who cannot meet new production standards or who lack credit or specialized knowledge. We need to ensure that globalization does not make exceptions and boxes, but follows rules of global interaction and cross-border interaction that are dedicated to sustainability and people.

The impact of trade liberalization over the past twenty years, since the introduction of structural adjustment programs in the early 1980s, and especially since the setting up of the World Trade Organization (WTO) in 1995, has become one of the most hotly contested debates in international economic policymaking.

The advocates of liberalization, often represented by the WB, IMF, WTO and a number of academics, call for liberalization to continue but also for policies to address the negative side effects of liberalization. They also call for the removal of trade-distorting subsidies and protectionism on the part of developed countries. They believe, that trade liberalization contributes to the alleviation of poverty, increases prosperity and speeds the development process. They also argue that the impacts of regional trade agreements are generally creation of trade and increase welfare. Gains are larger when developing countries can link up with an economy that is rich, large, or both.

According to a comprehensive assessment (World Bank, 1996) of major structural shifts beginning in the mid 1980s and subsequently accelerating, in most countries saving and
involvements have increased, inflation has decreased, foreign exchange rates have been stabilized, fiscal deficit reduced, and real interest rates established (World Bank, 1996).

A paper on trade policy for the Dominican Republic by the WB, recommends, “Increased openness to trade is one of the most important pending policies to sustain strong economic growth in the Dominican Republic.” The paper suggests that trade reforms can play an important role in supporting growth by making modern technology more profitable for domestic firms and by increasing specialization. Also, by reducing the implicit and explicit tax on exports, trade liberalization would provide an added boost to tourism and help develop more efficient and outward looking agriculture and industrial sectors. The paper goes on to state that; “failure to proceed with liberalization in the agriculture sector will limit the benefits of this reform, especially for the poor. The government would be well advised to pursue a gradual but more aggressive policy towards trade liberalization while providing adequate safety net mechanisms to the most vulnerable farmers. In this same area, even if in the short run current high protections were to be maintained, the country and the government would benefit by a more transparent management of non–tariff barriers (Ingco, 1997).”

Another paper by the International Monetary Fund, Malawi (IMF, 1998/99-2000/01) notes that Malawi’s first democratically elected government adopted a set of prudent financial policies with complementary structural reforms which were initiated to liberalize the economy and redirect public spending to priority areas such as health, education and agriculture in order to alleviate poverty. This paper also notes that the liberalization of agriculture brought benefits of high growth accruing primarily to the
smallholder farmers, most of whom, belong to the poorest segment of the population.

Another study by the WTO secretariat (Dan and Winters, 2000), concludes that ‘trade liberalization is generally a strong positive contributor to poverty alleviation. It also acknowledges that some people do lose in the short run from trade liberalization, and argues that the plight of the losers should not be ignored, and that it should be addressed with proper social safety nets and job retraining ‘rather than by abandoning reforms that benefit most people’.

According to Dollar and Kraay (2000), openness to international trade “raises income of poor by raising overall income, with insignificant effect on distribution of income”.

Ferreira, 1996 in a paper entitled “poverty and inequality during adjustment in rural Tanzania” claims that growth attributed to structural adjustment benefited the population generally “shifting a significant portion of the population from below the poverty line to above it. Only that smaller fraction of the population with extremely low income was unable to benefit from the economy’s improved performance, probably because the liberalization process that encouraged growth rewarded those with education, excluding from benefits those with little education”.

Besides these positive views about trade liberalization there are a series of negative perspectives on the Impact Of trade liberalization.

The report of a UNU – UNDP project (Ginkel, 2000), that compiled all available data on inequality trends into the World Income Inequality Database (WIID), based on data from 149 countries, shows clearly that ‘inequality has risen in most countries since the early-
mid 1980s.' 'What caused the increase? The project analyses indicate that, to an important extent, the rush to implement liberalization policies in the absence of adequate regulatory capacity triggered the recent surges in inequality.'

WB paper (Lundberg and Squire, 1999), finds that greater openness to trade is ‘correlated negatively’ with income growth among the poorest 40% of the population and ‘strongly and positively’ with income growth among the remaining 60%. ‘While greater openness benefits the majority, it harms the poorest. The results based on a sample of 38 countries between 1965 and 1992 are both strong and striking.

A Symposium on Agriculture, Trade and Food Security by the FAO on 16 countries and their experience in implementing the WTO/AoA finds that the implementation of AoA has led to a surge of imports but no corresponding increase in their exports, and this is forcing local farmers out of business. On the overall impact of the 16 countries, the study says: ‘a common reported concern was with a general concentration of farms, in a wide cross-section of countries. While this led to increased productivity and competitiveness with positive results, in the virtual absence of safety nets the process also marginalized small producers and added to unemployment and poverty. Of the 16 countries studied, only Thailand that saw its food exports increase since the implementation of the WTO/AoA (FAO, 1999).

Another FAO study (Weeks, 1997) found that liberalization had no real impact on growth of exports in general. This study on five Central American countries shows that in most respects the five countries did far better during the interventionist period (the 1970s) than
they have fared since liberalization. Only in Costa Rica did liberalization coincide with a rise in net agricultural exports.

Only certain type of farmers benefit from globalization, 'the benefits of globalization/liberalization to low-income agricultural producers are likely to be very limited. The greatest scope for increased trade is in relatively high-value sub-sectors such as horticulture; but their relative capital intensity limits the scope for low income producers to benefit' (UNCTAD, 1996). 'Where additional agricultural income (brought about by globalization/liberalization) is concentrated in the hands of larger producers, and/or liberalization gives rise to an increase in the concentration of land ownership, an increase in overall poverty is possible.' It quotes Mindanao, Philippines as an example 'many of these factors (limited availability of capital, credit, technology and inputs) are compounded by the potential short-term costs of liberalization (UNCTAD, 1996).

The International Fund for Agriculture Development (IFAD) quoted the example of Chile where the boom in exports of fruit from Chile’s central valley, partially reversed the impact on land structure of a 1968 land reform as capital and information requirements discriminate against small landowners. Small-holders, especially the recent beneficiaries of the land reform, could not make the large initial investments in fruit trees with no return over an extended gestation period, nor the investments in standardized production and packaging, and were rarely able to obtain credit. They also lacked the necessary technical expertise in fruit production. But at the same time, since fruit production is fairly labor intensive, demand for labor rose significantly, providing employment for many poor households (IFAD, 2000).
In a critique of the Dollar and Kraay paper, the Washington-based center for Economic and Policy Research point out that the growth slowdown of the last two decades, which has coincided with increasing globalization, should cause economists who advocate indiscriminate opening to trade and financial flows at least some cause for reflection, it may mean that some of the development strategies that have proved successful in the past will require a wider range of intervention and flexibility on a number of policies.

Reforms in Madagascar seem to have hurt the rural poor despite the increase in their food output. Following reform, agriculture grew at fastest rate, which it had (albeit still at a modest rate), with growth concentrated among the smallest farmers. But the evidence also shows deepening poverty during and following liberalization, particularly in rural areas. Nutritional, educational and spending data all suggest significant deterioration in living standards among the country’s primarily rural poor. An important cause appears to be the significant liberalization induced rise in all the major food prices, particularly rice, says draft of the World Development Report 2000, which did not appear to the final version of the report.

In short much of the literature reviewed here found that trade liberalization has different impacts on different groups. While most studies suggest that, on balance, the general population will benefit, they also find that it is the poor who experience greatest difficulty. And, within the poor, certain sub-groups, namely small farmers, women and children suffer the most. Small Farmers is the group, which faces hardest hit by trade liberalization in the agricultural sector, by Structural Adjustment Programs, regional trade blocks and WTO AoA-led measures.
Chain of Economic Reforms in India:

Since July 1991, the Indian economy has witnessed a series of reforms, encompassing all major sectors of the economy (agriculture, industry, trade, foreign investment and technology, public sector, financial institutions and so on), it has marked a steady break from the past policy regime. The import substituting development strategy, hitherto nurtured by the Indian planning regime since 1951, was given up in favor of an export-linked strategy. India could no more keep aloof from the rest of the world, particularly if technological advances occurring elsewhere were to be assimilated and adopted to India’s own production requirements. And then came WTO on January 1, 1995, because of which India got further integrated into global economic system and become adherent of multilateral trade system. Finally, beginning April 1, 2000, all types of quantitative restrictions on imports nearly completely removed since April 1, 2001, exports and imports are now free of all restrictions.

It is nonetheless important to emphasize that in the post-Independence history of India’s economic life, the 1990s were a markedly different development decade where practically the whole of the old policy fabric that had doggedly endured itself since the beginning of the planning era in 1951, came under change. Foreign investment is now invited by all regions of India, in a wide range of areas, most significantly for removing the so-called infrastructural bottlenecks. Investment collaborations are negotiated by the hundreds. Technology import is no more a forbidden word. The public sector is shedding its unproductive weight while the private sector, mature enough as it is believed to have grown by now, has entered some of those difficult and strategic areas that were
once considered to be far beyond their investment capability. National priorities are now being worked out in terms of international market calculations, getting the prices right, both nationally and internationally is given out to be the infallible panacea for growth, employment and economic welfare. Exports and imports are now free of the regulations that were once taken to be a big hurdle in growth and trade expansion. Every sector of the Indian economy is now attuning itself to the changing economic environment. The state itself struggling to demarcate the balance between development and welfare functions.

Every section of Indian economy is now linked with the world outside, either through its direct involvement in international trade or through its indirect linkages with the export transactions of other sectors of the economy. The new policy regime is much important, and relevant, to farmers, industrialists, traders etc. It hardly needs to be emphasized that all categories of economic functionaries engaged in production and services sectors have to adjust to the changing technology-intensive investment, production, labor management and market requirements, dictated partly by compulsions of internal competitions and partly by international commercial pressure (Chadha and Sahu, 2002).

**Macro Economic Reforms and Indian Agriculture:**

In June 1991, faced with severe fiscal and trade imbalances and double digit inflation, the government officially ended four decades of government led growth and embarked on a new approach that emphasized stabilizing the economy, reforming the investment, trade, tax regimes, the financial sector, and public enterprises; and giving private sector a much
greater role in India’s development.

With the liberalization of exchange rate and opening up of the economy, the terms of trade for agriculture have shown a significant improvement (Table 1).

**Table 1**: Index of Net Barter Terms of Trade and Food grains Terms of Trade.

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Barter Terms of Trade</th>
<th>Food grains Terms of Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-91</td>
<td>98.5</td>
<td>94.0</td>
</tr>
<tr>
<td>1991-92</td>
<td>104.6</td>
<td>100.00</td>
</tr>
<tr>
<td>1992-93</td>
<td>103.3</td>
<td>102.00</td>
</tr>
<tr>
<td>1993-94</td>
<td>100.0</td>
<td>100.00</td>
</tr>
<tr>
<td>1994-95</td>
<td>103.3</td>
<td>101.5</td>
</tr>
<tr>
<td>1995-96</td>
<td>103.6</td>
<td>101.5</td>
</tr>
<tr>
<td>1996-97</td>
<td>104.8</td>
<td>107.2</td>
</tr>
<tr>
<td>1997-98</td>
<td>101.5</td>
<td>103.1</td>
</tr>
<tr>
<td>1998-99</td>
<td>106.3</td>
<td>104.8</td>
</tr>
</tbody>
</table>

**Source**: Thamarajakshi, 2000.

However, despite favorable environment created by macroeconomic reforms, including trade liberalization, in the 1990s the average growth of GDP in agriculture and allied sector slowed down in post reform period when compared to the preceding decades (Table 2).

**Table 2**: Growth Rates of GDP in Agriculture and Allied Sectors and Total GDP (Post and Pre Reform Period)

<table>
<thead>
<tr>
<th>Period</th>
<th>Agriculture and allied sector</th>
<th>GDP total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre reform period (1980-81 to 1990-91)</td>
<td>4.66</td>
<td>5.79</td>
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</table>

Why agriculture supplies failed to respond to this favorable incentive framework? The reason lies on shortfalls in public investment and in the provision of agricultural services. The experience of 1990s clearly demonstrates that far from trade liberalization dampening the performance of agriculture, the failure of public investment and effort is responsible for the inability to benefit from trade liberalization by stepping up and diversifying agricultural output in a cost-effective way (Hanumantha Rao, 2001).

The second major reason is the high domestic support being provided to agriculture in the developed countries, especially the European Union in the west and Japan in the east. Apart from restriction on the imports of farm products through various tariff and non-tariff barriers, this support consisted of measures such as high support prices for farm produce and export subsidies, which are now shifted to direct measure for income support such as deficiency payments in the US, and compensation to farmers in the European union via acreage and headage premiums which exempt from reduction in the domestic support (Table 3).

### Table 3: Agriculture Subsidies in Selected Developed Countries.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>12000</td>
<td>75</td>
<td>12000</td>
<td>7000</td>
<td>42</td>
<td>8000</td>
<td>48</td>
</tr>
<tr>
<td>Japan</td>
<td>15000</td>
<td>1048</td>
<td>21000</td>
<td>10211</td>
<td>22000</td>
<td>10005</td>
<td>26000</td>
</tr>
<tr>
<td>USA</td>
<td>17000</td>
<td>98</td>
<td>12000</td>
<td>73</td>
<td>19000</td>
<td>116</td>
<td>21000</td>
</tr>
<tr>
<td>EC</td>
<td>11000</td>
<td>187</td>
<td>10000</td>
<td>189</td>
<td>11000</td>
<td>209</td>
<td>11000</td>
</tr>
</tbody>
</table>

Chapter VII

The reason behind tendency to subsidized agriculture in the developed countries is growth of interest groups, which are coming in the way of the operation of Ricardo’s principle of comparative advantage.

The demands for farm products at higher levels of income respond little to changes in incomes and prices. This explains why a small increase in farm output results in more than proportionate fall in its price. Thus farm income declined very often in developed countries despite, and indeed owing to the rise in farm output. This was the genesis of support prices to the farmers. The problem was mitigated to some extent by finding markets for the export of food grains. However, the rising support prices perpetuated high cost agriculture primarily because there was little incentive to shift resources from agriculture, especially labor, whose opportunity cost rose on account of overall development and rise in wages. In the US, for example during the period 1992-97, agriculture accounted for a mere 2 percent of GDP, but employed 4 percent of total labor force. On the other hand, the services sector, which accounted for 72 percent of GDP, employed 63 percent of labor force. The productivity of labor in agriculture is thus comparatively much lower. The position is similar in countries constituting European Union: Over the corresponding period agriculture contributed 2 percent of GDP in France with 6 percent share of labor force; in Germany agriculture’s contribution to GDP was 1 percent with 3 percent share in labor force. The corresponding figures for UK were 2 percent and 3 percent (World Bank, 2000). There is thus deterioration in the relative productivity of labor in agriculture in US and countries of EU on account of high farm support. The food surpluses of the farmers produced at high cost could not become
competitive in the export market without heavy subsidies on export (Hanumantha Rao, 2001).

One wonders how governments in countries where a mere 3 to 5 percent of total labor force is employed in agriculture have to succumb to pressures from farm lobbies. Part of explanation, of course, lies in the sheer ability of these rich countries to foot the bill. Another reason is that since agriculture in these countries is highly input incentive, a large complex of agro-industries having backward linkage with agriculture as input supplier constitute the highly organized and vocal sections of these farm lobbies. Moreover, these countries are, in any case, incurring huge expenditure on social security for the unemployed in the rest of the economy. The differences is that in case of farm sector, these payments take the form of compensation for lower prices, thus providing incentive for committing resources beyond what would otherwise have been allocated if farm prices were allowed to be determined by market forces.

**Welfare Effects of Agricultural Trade Liberalization:**

Trade liberalization would generate significant net economic benefits. Taking into account the benefits to producers and consumers and tax saving resulting from removals of subsidies, liberalizing trade in agricultural commodities would generate global benefits of 35.7 billion in 2020 (Table 4).

<table>
<thead>
<tr>
<th>Region/country</th>
<th>Gain from global trade liberalization</th>
<th>Total value (billion of US $)</th>
<th>Share of Value of agri. prod. %</th>
<th>Share of GDP %</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td></td>
<td>35.7</td>
<td>3.0</td>
<td>0.07</td>
</tr>
<tr>
<td>Developed Countries</td>
<td></td>
<td>14.2</td>
<td>3.0</td>
<td>0.04</td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td>4.3</td>
<td>2.5</td>
<td>0.03</td>
</tr>
<tr>
<td>Europe (EU-15)</td>
<td></td>
<td>4.2</td>
<td>3.0</td>
<td>0.03</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td>3.0</td>
<td>22.3</td>
<td>0.04</td>
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<tr>
<td>Developing World</td>
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<td>21.5</td>
<td>3.0</td>
<td>0.14</td>
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<tr>
<td>Latin America</td>
<td></td>
<td>3.0</td>
<td>2.1</td>
<td>0.07</td>
</tr>
<tr>
<td>WANA</td>
<td></td>
<td>2.3</td>
<td>5.9</td>
<td>0.13</td>
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<tr>
<td>SS Africa</td>
<td></td>
<td>4.4</td>
<td>10.4</td>
<td>1.03</td>
</tr>
<tr>
<td>China</td>
<td></td>
<td>3.6</td>
<td>1.3</td>
<td>0.11</td>
</tr>
<tr>
<td>Other East Asian Countries</td>
<td></td>
<td>2.4</td>
<td>36.7</td>
<td>0.18</td>
</tr>
<tr>
<td>India</td>
<td></td>
<td>2.1</td>
<td>1.9</td>
<td>0.14</td>
</tr>
<tr>
<td>Other South Asian Countries</td>
<td></td>
<td>1.3</td>
<td>3.3</td>
<td>0.36</td>
</tr>
<tr>
<td>South East Asia</td>
<td></td>
<td>2.5</td>
<td>3.5</td>
<td>0.15</td>
</tr>
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</table>


Both developed and developing regions benefit, with the former gaining US $ 14.2 billion and the later US $ 21.5 billion. Although these gains are not large compared with GDP, in many regions they are significant compared with the value of agricultural production.

In fact this type of simulation capture only a portion of the potential effect of trade...
liberalization. If removing trade barriers simulated overall economic growth by boosting industrial production, it would also have large effects on agriculture and food consumption.

Globalization and Food Security in India:

The links between globalization, poverty and food security in the short-term are less clear. While opponents of trade liberalization maintain that Agreement on Agriculture Under WTO, deteriorate food security situation in the developing countries, “the evidence does not lend credence to the view that trade liberalization would endanger India’s food security. Achievement of effective food security when enough stock of food grains can be accumulated, thanks to India’s comparative advantage in respect of major cereals, hinges basically on raising the purchasing power of the poor through the generation of employment opportunities” (Hanumantha Rao, 2001).

Table 5, shows Per Capita food availability, percentage and number of malnourished children in 1990 and 2020 (under different scenarios in 2020). Under scenario of trade liberalization Per Capita food availability increases by 16 percent over the availability of 1990, at the same time percentage and number of malnourished children will reduce by 24 and 35 percent respectively between 1990 and 2020. Other scenarios provide some differences but they are unlikely to happen under special social and economic circumstances of India.
Table 5: Per Capita Food Availability, Percentage and Number of Malnourished Children in India, 1990 and 2020: Various Scenarios.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Per capita food availability (Kcal)</th>
<th>% of malnourished children</th>
<th>Number of malnourished children (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2,332</td>
<td>63</td>
<td>70.86</td>
</tr>
<tr>
<td>2020:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Baseline</td>
<td>2,692</td>
<td>45.49</td>
<td>47.73</td>
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<tr>
<td>Low population growth</td>
<td>2,814</td>
<td>41.53</td>
<td>39.87</td>
</tr>
<tr>
<td>Low investment slow growth</td>
<td>2,490</td>
<td>56.31</td>
<td>59.08</td>
</tr>
<tr>
<td>High investment rapid growth</td>
<td>2,886</td>
<td>35.71</td>
<td>37.47</td>
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<tr>
<td>Trade liberalization</td>
<td>2,711</td>
<td>43.91</td>
<td>46.07</td>
</tr>
</tbody>
</table>

Source: IFPRI, IMPACT simulation results Rosegrant et al. 1995.

This improvement in the state of food security is likely to happen because, AOA under WTO does not constrain domestic policies that genuinely address poverty and food security, such as programs aimed at poor producers and consumers, stock for food security, and domestic food aids for population in need.

**Putting Globalization to Work for Poor:**

Trade liberalization, opening up economies in both developed and developing countries, more integrated international capital markets, and a free flow of labor, information, and technology are all parts of trend toward increasing globalization that is likely to continue and may even accelerate (Andersen, 2000). The role of the market becomes a paramount consideration. Agricultural and rural development become essential for generating broad
based economic growth. Under the new market based and trade driven system, economic
growth and national competitiveness are dependent on the development of a dynamic
agricultural sector. Countries like Chile, Malaysia, and Thailand have grown and
prospered by investing in their agriculture sectors (Bathrick, 1998). In India “given its
sheer size and inherent characteristics, a dynamic agriculture sector becomes as essential
element for broad-based economic growth” (Pandya-Lorch, 1994), while also enhancing
the environment and creating a stable society. Agriculture requires a vision that
transcends traditional sector approaches based on production. A pervasive import
substitution legacy needs to be overcome to optimize response to the new economic
order. Globalization calls for creation of the capacity to strategically advance and
promote national comparative advantages and competitiveness (IFPRI, 2002).

To nurture the new agricultural system, the public and private system will need to
develop institutional capacities and technologies. Government will have to reformulate
attitudes; articulate national level comparative advantages, and define and develop
operational roles and political support for cooperation among the producers, agribusiness,
investment, NGOs, universities, and international research communities.

If India aggressively take the initiative and make major internal structural reforms-
providing capable small and medium sized farmers and agribusinesses with essential
skills, tools, and infrastructure, and facilitating private investment they will be better
suited to meet unprecedented challenges and achieve more sustainable growth in
political, economic, and environmental terms. Conversely, if structural reforms are not
made, stagnation will occur.