

**THE IMPACT OF GLOBALISATION AND LIBERALISATION ON
AGRICULTURE AND SMALL FARMERS IN DEVELOPING
COUNTRIES:**

THE CASE OF THE PHILIPPINES

By Victoria Tauli-Corpuz, Ruth Sidchogan-Batani and Jim Maza

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THE IMPACT OF GLOBALISATION AND LIBERALISATION ON AGRICULTURE AND SMALL FARMERS IN DEVELOPING COUNTRIES:

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A. INTRODUCTION

This report presents some evidence of the effects of globalisation (including trade liberalisation) on poor rural producers in the Philippines. It includes two case studies on the vegetable sector and the poultry sector.

The paper examines some aspects of the globalisation and liberalisation process that has had effects on rural producers. In particular it looks at the effects of trade liberalisation that was undertaken as part of the Philippines' commitments under the World Trade Organisation. The social effects of liberalisation on rural producers (including on income, livelihoods and food security) are examined. The paper also briefly examines the effects of trade liberalisation on IFAD's operations, by looking at its implications for IFAD's CHARM project in the Philippines.

In the two case studies, quantitative and qualitative methods are used. These include in-depth interviews and group discussions in these communities; gathering and analysis of statistics and information from the Department of Agriculture, the Municipal offices and Rural Health Offices, and a review of literature on these issues.

Two areas were chosen for the case studies, one being involved in vegetable growing and the other in poultry raising.

The first case study (on vegetable growing) was done in the Cordillera region, in Barangay Cattubo of Atok Municipality in Benguet Province. This is an area in which an IFAD project has been undertaken, i.e. the Cordillera Highland Agricultural Resource Management (CHARM) project. The project has a budget of US \$41.4 million, most of it financed by loan the Asian Development Bank (ADB) and the International Fund for Agricultural Development (IFAD).

This area was chosen for the case study for two reasons. Firstly, this is a typical indigenous peoples' village which used to be engaged in subsistence production but later shifted to cash crop production with the facilitation of government programs. The indigenous people here

have been engaged in raising vegetables on a commercial scale since the 1940s up to the present. Secondly, this is a CHARM project area and it is therefore a beneficiary of IFAD funding. Since one of the objectives of the study is to look at the impact of globalisation on IFAD's operations, the village was chosen. The CHARM project's main objective is alleviating poverty in its implementation areas in the Cordillera region. It was implemented from June 1997 and the final year was 2004. It would be useful to see what the impact of the project has been on alleviating poverty in the community and whether the achievement of this goal was affected by trade liberalization.

The second case study was done in Southern Tagalog region in the Municipality of Alaminos, Laguna Province. This is a rural poultry-producing lowland community. It can be reached from Manila in two to three hours. This municipality is also involved in raising corn and rice. It is also a fourth class municipality but unlike the first area it is well served with electricity and it has piped water. One of the key areas liberalized in the agriculture sector is the poultry and livestock industry. It was thus decided to undertake a case study of a community involved in the poultry sector to examine the structure of the poultry industry, including the relations between its various levels (the large "integrator" firms, the contractor farmers who supply them, and the backyard poultry farmers). Some aspects of the effects of import liberalisation on the community and the sector are also examined.

B. BACKGROUND ON THE TRADE POLICY AND AGRICULTURE SITUATION OF THE PHILIPPINES

Agriculture Situation and Rural Poverty in the Philippines

The Philippine economy is still basically agricultural. Two-thirds of its population of 75.3 million and three fourths of the poor depend mainly on agriculture for their livelihood. Performance in this sector has been weak. The sector's contribution to GDP was 20% during the 1995-2000 period. However its share of total employment was much higher at 40% during this same period. (Gonzales 2003).

In the 1960s and 1970s, agriculture consistently had a growth rate of about 5 percent. This went down to 2 percent in the 1990s. From 1995 to 1999, after the accession of the Philippines to the WTO, the agricultural sector grew only by an average of 1.8 percent. Agricultural imports significantly increased, due to import liberalisation, and total exports decreased. In 1985 agricultural imports compared to exports was 46 percent and in 1998 this ratio increased to 151 percent.¹

¹Briones, Angelina, *National Study: Philippines, 2002*, in *Organic Agriculture and Rural Poverty Alleviation, Potential and Best Practices in Asia*, UN-ESCAP. Bangkok.

Data providing a profile of rural poverty in the Philippines, based on the current official practice in poverty measurement², show there is very slow progress in improving the poverty situation. Rural poverty fell from 56 percent in 1985 to 51 percent in 1997. However, the number of poor people increased from 18.7 million to 19.6 million. The rural poor still account for 70 percent of poor people in the country. (Canlas and Fujisaki, 2001). Table 1 shows in more detail the picture of rural poverty as well as poverty in the agriculture sector through the years.

Table 1: Rural Poverty Estimates Based on Official Measurement Practice					
	1985	1988	1991	1994	1997
Rural					
Incidence (%)	56.4	52.3	55.0	53.1	51.4
No. of Poor Persons (in thousands)	18,744	18,118	17,346	17,988	19,591
Share in total poverty (%)	70.2	71.4	60.8	65.7	72.2
Agriculture (urban and rural)					
Incidence	63.7	61.7	63.7	62.0	60.3
No. of poor persons (in thousands)	16,344	15,552	17,910	18,103	17,561
Rural Share in total poverty	61.3	61.7	62.7	66.2	64.7

*Source: Alfredo Balisacan's estimates based on Family Income and Expenditure Survey (National Statistics Office), various years*³

The Philippines government has also been tepid in supporting agriculture, as seen in the low and declining shares of the agriculture sector in government expenditure and in government loans. The government spent less than 5 percent of total government expenditure on this major sector during the ten years 1992 to 2001. The share given to agriculture as a portion of total government expenditure in fact declined from 3.3% in 1992 to 3.1% in 2001 (See Table 2).

² This entailed estimating the minimum income levels – i.e. sufficient to meet the nutritional norm and other basic needs- for urban and rural areas in each region. A household with an annual income, adjusted for family size, below the relevant threshold, is deemed poor. (Based on National Economic Development Authority definition).

³ Balisacan, Arsenio, *Rural Development in the 21st Century: Monitoring and Assessing Performance in Rural Poverty Reduction*, 2001, in Canlas and Fujisaki, *The Philippine Economy: Alternatives for the 21st Century*, University of the Philippines Press, Quezon City.

Government Loans to agriculture have also been very low, amounting to only 1 percent of total loans granted to all sectors in 1998 onwards. The share had declined from 5.3% to 0.9% in 1997, rising only slightly to about 1% in 1998-2000. (Table 3).

Table 2. Share of Agriculture Sector in Total Government Expenditure, Philippines 1992-2001

ITEM	1992	1994	1996	1998	1999	2000	2001 ^P
GOVERNMENT EXPENDITURE ON AGRICULTURE (MILLION PESOS)	9,366	10,075	19,100	17,354	26,847	28,722	21,623
TOTAL NATIONAL GOVERNMENT EXPENDITURES (MILLION PESOS)	286,603	327,768	445,735	537,433	580,385	682,460	699,878
SHARE OF AGRICULTURAL EXPENDITURE IN TOTAL NATIONAL GOVERNMENT EXPENDITURES (%)	3.27	3.07	4.29	3.23	4.63	4.21	3.09

Source: Bureau of Agricultural Statistics, Department of Agriculture

^P Preliminary

Table 3. Share of Agriculture Sector in Total Government Loans, Philippines, 1992-2001

ITEM	1991	1993	1995	1997	1999	2000	2001 ^p
AGRICULTURAL PRODUCTION LOANS GRANTED (MILLION PESOS)	46,164.5	47,878.1	62,211.7	90,525.0	103,511.4	110,007.1	111,650.2
TOTAL LOANS (BILLION PESOS AT CURRENT PRICES)	879.80	3,145.28	3,387.50	10,141.48	9,909.13	10,644.57	10,327.44
SHARE OF AGRICULTURAL LOANS IN TOTAL LOANS (%) GRANTED RATIO (%)	5.25	1.52	1.84	0.89	1.04	1.03	1.08

Source: Bureau of Agricultural Statistics, Department of Agriculture

^p Preliminary

^u Data unavailable

The low priority accorded by the Philippine government to agriculture contrasts with how governments of developed countries protect their agriculture. The US administration has adopted a farm bill, the Farm Security and Rural Investment Act with subsidies amounting to US\$180 billion.⁴ Under this scheme, transnational companies such as Cargill Corporation and Monsanto are able to continue buying commodities from farmers at artificially low prices and “dump” these commodities by exporting them to developing countries at prices below the cost of production. The US in fact exports corn and wheat at prices 20% and 46% below production cost, respectively.⁵

U.S. exports of poultry products increased rapidly during the 1990s and now contribute substantially to its positive agricultural balance of trade. In 1999, US total value of poultry product exports was \$2.1 billion, while the value of all its poultry imports was only \$210 million. Its \$1.89 billion surplus from poultry trade accounted for 18 percent of the \$10.4 billion US agricultural trade surplus. Exports of broiler meat account for most of the poultry meat exports, over 90 percent of the volume and approximately 68 percent of the value. Turkeys, eggs, and prepared meat products each account for about 6-7 percent of the value of poultry exports.⁶

The Philippines is one of the major importers of US pork and poultry products. The US notified the Philippine Government in April 1, 1997 that it intends to bring to the WTO a case against the Philippine Government’s for its failure to implement its Uruguay Round tariff rate quota commitment on pork and poultry. This was highlighted as a key issue in a trip report of the US Committee on Agriculture Congressional Delegation to Thailand and the Philippines in 1997.⁷ According to this report the Philippines MAV quota commitments should take effect by July 1, 1995 but the Philippine Congress did not enact an enabling legislation for this to happen. Because of technical errors committed during the Uruguay Round the Philippines proposed a renegotiation of its import commitments for pork, poultry and live poultry. Unfortunately, this was rejected by the US which had a clear vested interest in opening up significantly the Philippine market to its poultry products. (Habito, 2002)

The European Union also maintains very high domestic support for agriculture, which also allows its food companies to buy cheaply from farmers and to sell at artificially low prices to developing countries.

It is likely that the high domestic subsidies in the US and EU will remain, although they may shift the subsidies from one category to another, to comply with their commitments in the WTO. Despite this, the developing countries are being asked to further reduce their agricultural tariffs, this time even more steeply than they did under the Uruguay Round.

⁴ Akande, Wole. *How agriculture subsidies in rich countries hurt poor nations*, October 19, 2002, YellowTimes.org

⁵ *ibid.*

⁶ Dale Colyer, Division of Resource Management, West Virginia University

⁷ Summary of the Committee on Agriculture Trip to Thailand and the Philippines, Committee on Agriculture Congressional Delegation to Thailand and the Philippines, May 24-June 1, 1997. downloaded from <http://www.house.gov/agriculture/105/thaiphil.htm>, 19 April 2006.

Agricultural Reforms and Implications of WTO Commitments

Although attempts had been made to liberalise Philippines agriculture since the 1960s, it is only with the country's entry into the WTO in 1995 that extensive liberalization has taken place across the sector.

In the 1960s, the initial attempt was made in trade reform. The reform policy included decontrol, import and export licensing was no longer required and the fixed exchange rate policy was ended. However, due to balance of payments problems, industry protection and import controls were imposed, and the number of regulated commodity lines in fact rose from 1,307 in 1970 to 1,820 in 1980.

In the 1980s, a second attempt was made at trade reform. This was carried out as part of the structural adjustment programme under the World Bank and IMF advice. An import liberalisation programme (ILP) and a tariff reform programme (TRP) were implemented. Tariff rates were reduced under the TRP from 100 percent to between 10 to 50 percent. Under the ILP, the proportion of restricted items was reduced from 24 to 20 per cent. However, because of the economic crisis in 1983, the ILP was postponed for three years. Import liberalisation resumed in 1986, mostly on industrial goods and also on fertiliser and wheat (but not for imports of agricultural commodities); and agricultural export taxes were removed (Gonzalez, 2003).

Another round of tariff reductions was implemented in the 1990s. Executive Order 470 in 1991 reduced the number of high-tariff lines over five years (to 1995). It also increased the number in low-tariff lines. The majority of commodity lines fell within the 10-30 percent rates. Executive Order 8 was issued in 1992 which removed quantitative restrictions (QR) and replaced this with tariffs. This was however reversed. Because of a strong demand from the farmers' movement, a Magna Carta for Small Farmers Law (RA 7607) was enacted. In 1993, Memorandum Order 95 restored QRs on agricultural products on corn, pork and poultry (but not for beef and sugar). The aim of the law was to enable products to be grown locally in sufficient numbers (Gonzales 2003).

Another victory for the farmers during this period was the passage of the Seed Industry Development Act (RA 7308) which prevented the importation of seeds when these are sufficiently produced in the country.

However, these laws were short-lived. The government passed the Agricultural Tariffication Act of 1995 (Republic Act 8178) which repealed these two laws. This Act also repealed the law prohibiting the importation of onion, potato, garlic and cabbage (RA 1296) and coffee (RA 2712); and centralizing the importation of beef (RA 1297). The tariffication of QRs was an integral part of this Act. Between 1995-96, the initial bound tariffs for some sensitive agricultural products were within 10-50%. This Act ensured that all sensitive products (which includes maize, poultry, onion, potato, garlic, cabbage, etc.) will fall within this range and QRs will be replaced by tariffs twice the final rates committed in 1995.(Aquino, 2004).

All these were done as part of the implementation of the WTO's Agreement on Agriculture (AoA).

The Philippines made very significant commitments under the AoA to liberalise its imports. Firstly, all quantitative restrictions were eliminated and converted to tariffs. Secondly, the country committed to significantly reduce its agricultural tariffs. The commitment, common for developing countries in general, is for a reduction in the average bound agricultural tariff by 24 percent, with a minimum 10 percent cut per tariff line (to be implemented from 1995 to 2004).

According to data in Gonzales (2003: p441-442), the bound overall agricultural tariff rate for the Philippines was scheduled to decline from 19.6% in 1997 to 14.5% (1998), 14.3% (1999) and 13.3% (2000). Even more important are the commitments that affect the tariff rates on the country's sensitive agricultural products. At the start of the implementation period in 1995-96, 50% of the most sensitive products have high bound rates of 95-100 percent with another 22% of products in the 55-90 percent tariff levels. However, by 2003, the Philippines committed to place 90% its most sensitive agricultural products in the 35-50% tariff category. Thus, 50% of sensitive products that had tariffs of around 100% in 1996 would now have tariffs of 35-50%, which represents a very significant decline in protection from imports. For vegetables, the situation is even worse. President Gloria Macapagal-Arroyo released Executive Order No. 164 in January 2003, which stipulated that the current applied rates for most vegetables (except cabbage and onion) will be seven percent.

Besides reduction in tariffs, the Philippines also committed to enhance market access through tariff rate quotas, or the offer of giving minimum access volumes (MAVs). Within these volumes, lower tariffs are applied, thus enabling market access, whereas tariffs beyond the MAV levels would have higher tariffs applied to them. The Philippines committed to MAVs equivalent to 3 percent of the level of 1986-88 domestic consumption of the affected items, to be applied for 1995; rising to 5 percent of the 1986-88 consumption level to be applied for 2004.

The MAV mechanism is an important one for facilitating imports, even when the out-of-quota tariff is high. It is thus an important factor affecting the competitive environment of local small farmers. The Philippines agreed to allocate a minimum volume of imports of certain goods as a "minimum access volume" (MAV). Within this quantity, imports would be subjected to lower tariff levels while at quantities above the MAV level, significantly higher tariffs would apply. It is thus important what the MAV is for the products concerned; the higher the volume, the greater the amount of imports are subjected to low tariffs, thus allowing these quantities to gain access to the Philippines market.

The situation became more serious than it could have been due to serious technical mistakes made by the Philippine negotiators when they were negotiating the WTO Agreements. When the Philippines entered the MAV amounts in its schedule of commitments in the Agreement on Agriculture, it made mistakes. It committed larger minimum MAVs beyond what it intended to do or was required to do. For example, although the Philippines intended to commit only 2,570 heads of swine as its MAV, it incorrectly committed almost 2.6 million

heads. What is important for our case study on chicken, the Philippines committed 5.7 million heads of live poultry and 14,090 metric tons of poultry meat, when it had intended to commit only 1.65 million heads of live poultry and 2,218 metric tons of poultry meat.

Thus, the market access provided for these items were far above what had been intended or required under the Agreement on Agriculture. Table 4 shows the erroneous minimum access commitments and the correct amounts that should have been committed.

There was a huge outcry from the public about this mistake, and the Philippine government tried to have the errors rectified. However, the United States, European Union and Japan objected, and the amounts that had been originally placed in the schedule had to stand. Thus, the country remained burdened with these minimum access commitments. One result was that the growth in cheap imported chicken and chicken parts was higher than what it could otherwise have been. This growth started in 1996 and more than 85% of the imported chicken parts came from the US.⁸

**Table 4: ERRORS IN WTO COMMITMENTS IN THE PHILIPPINES
MINIMUM ACCESS VOLUMES FOR AGRICULTURE ITEMS**

Initial Quota Quantity for 1995	Quota incorrectly committed	Quota that should have been committed
Live Swine (head)	2,570,000	2,570
Live Poultry (head)	5,708,120	1,655,700
Pork (metric tons)	32,520	3,600
Poultry meat (mt)	14,090	2,218
Sugar (metric tons)	103,400	38,000

Source: Department of Trade and Industry, cited in Guzman (1999).

On the domestic front, the government promised to take measures to soften the negative impact that agricultural liberalization would have on the sector and on small farmers. The package of support promised included an action and budget plan for Uruguay Round adjustment measures (safety nets); enactment of legislation (for example, Agriculture and

⁸ "Fowl raisers cry 'foul'", Philippine Daily Inquirer, March 18,2000, p.1.

Fisheries Modernisation Act) to provide tariff reduction on inputs; legislation to provide trade remedies to act as safeguards against import surges, injury to domestic industries and dumping; and budget support to agriculture of Peso 73 billion from 1995 to 1998 (under the Uruguay Round Action Plan), support for irrigation of Peso 28 billion from 1995 to 1998 and Peso 6 billion per annum from 1999 to 2004.

However, these commitments to assist domestic agricultural producers have been inadequate, showing that the country was ill prepared to help the sector and its farmers cope with the effects of liberalization. The Department of Agriculture (DA), in 2001, admitted to a “virtual non-existence of domestic support structure” and that the government, six years into the agreement, has not enacted and enforced trade remedy laws on anti-dumping, countervailing measures, and special safeguard measures.

As stated above, the government promised to establish a 128 billion pesos fund for safety nets, infrastructure and competitiveness-enhancing public investments in recognition of the possible negative implications of the country’s entry into the WTO. According to the Department of Agriculture, the government was able to meet only 40 percent of this commitment. The government also provided domestic support in agriculture amounting to 4 percent of the value of agricultural production, which was below the 10 percent allowed under the WTO rule.

Compliance with the AoA ushered in an era of much greater “openness” of the Philippines agriculture sector. The Uruguay Round was anticipated to result in agricultural export benefits for developing countries like the Philippines. However, export performance has been very disappointing. In fact the performance in the post-Uruguay Round period was worse than in the pre-WTO period. In 1985-94, agricultural export earnings increased on average by 2.5% per annum, whereas in 1995-99 the average growth rate was a mere 0.18%. Pointing to these figures, Gonzales (2003) in his Philippines case study for the FAO says that the decline in agriculture export growth rates was reflected in the declining share of agricultural exports in total Philippine export receipts (from 16% in 1985-94 to 8% in 1995-2000). Tariff and non-tariff protection were the cause of non-expansion of Philippines agricultural exports. On the latter, Gonzales (2003: p455) cites the case of banana and pineapple exports to Australia being hindered by sanitary and phyto-sanitary requirements, as standards were suddenly raised to protect Australia’s inefficient banana and pineapple farmers.

While exports stagnated, Philippine imports have surged since the WTO’s Agreement on Agriculture came into force.

The trend of surging agricultural imports, with export value stagnating, can be seen in Table 5. Between 1991 and 1998, imports increased from US\$1,260 million to US\$2,895 million while exports only rose from \$1,845 million to \$2,225 million. This has resulted in a dramatic worsening of the agricultural trade balance of the country. The balance of agricultural trade turned around from a surplus of \$585 million in 1991 to a deficit of \$670 million in 1998. The trade deficit continued in 1999 and 2000.

Data from Gonzales (2003: 458-463) provide more evidence of the country's worsening agricultural trade situation. In 1985-94, agricultural exports averaged US\$1,260 million a year, and imports averaged \$1,103, thus resulting in a surplus of \$157 million a year. However, in 1995-99, exports averaged \$1,703 million while imports averaged \$2,627 million, resulting in an average net deficit of \$924 million a year. During the post-Uruguay Round years 1995-99, export earnings grew 0.18% a year on average while imports grew by 8.01% a year.

Another troubling finding is that Philippines agriculture has become less globally competitive since the implementation of the WTO's Agreement on Agriculture. According to Gonzales (2003: p444): "The impact of the AoA was generally a decline in global competitiveness among sensitive Philippine agribusiness products." Studies that analysed the competitiveness of rice, corn, beef cattle, hogs, broiler and eggs in the pre-AoA period (1994) and the post-AoA period (1999) showed that these products were competitiveness as import substitutes before the signing of the AoA, but such competitiveness was eroded subsequently. "The major reason for this decline in cost competitiveness was due to the general unpreparedness of Philippine agriculture to face global competition" (Gonzales 2003: p444).

Table 5: BALANCE OF TRADE IN AGRICULTURAL PRODUCTS, PHILIPPINES (1990-2000) (FOB Value in million US Dollars)

	Exports	Imports	Balance of Trade
1990	1,701	1,555	146
1991	1,845	1,260	585
1992	1,866	1,560	306
1993	1,918	1,626	292
1994	2,072	2,114	(42)
1995	2,499	2,649	(150)
1996	2,307	3,096	(789)
1997	2,338	3,102	(764)
1998	2,225	2,895	(670)
1999/a	718	1,244	(527)
2000/a	809	1,105	(297)

/a Jan to May figures only

Source: Bureau of Agricultural Statistics

The deterioration in the Philippines' agricultural trade position and the rapid liberalisation of imports in particular has had adverse effects on the local small farmers. Small scale rural producers compose the majority of the agricultural sector in the Philippines. The poultry and livestock sector, for instance, is mainly a backyard industry. 75 percent of producers of poultry and livestock are backyard raisers and they contribute to 80 percent of the total production.⁹

Most of the vegetable growers are also small-owner tillers. Around 70% of the country's total supply of potato, cabbage and other semi-temperate crops are produced in the Cordillera region, particularly in Benguet and Mt. Province. The region is considered as the Vegetable Belt of the country. This may not be the case in the near future as the entry of cheap imported vegetables has directly affected the livelihood of local producers. In 1981 when the country started to import vegetables, 4.62 million kilograms of vegetables entered the local market. After the WTO agreements came into force, vegetable importation surged to 171.37 million kilograms worth \$243 million in 1997. Benguet farmers reportedly lost Peso 2.1 billion in potential earnings when 82.7 million kilograms of fresh vegetables and root crops from the United States, Australia, China and Taiwan entered the country in the first half of 2002.

The impact of agricultural liberalization, specifically the reduction of tariffs, is recognized by the Philippine Congress as elucidated in Resolution No. 570 of the House of Representatives (12th Congress, 14 January 2003). This Resolution stated that "the removal of quantitative restrictions and the more than halving of average nominal tariffs in the sector...has caused imported vegetables to flood the domestic market with an almost three-fold increase from 42,000 metric tons (MT) in 1995 to 115,000 MT in 2000." These vegetable imports could have been easily raised by local farmers. The United States, Australia, New Zealand, the Netherlands, Singapore and China were identified by this Resolution as the sources of cheap vegetable imports.

The case studies which follow will show in more detail the effects of liberalisation on rural producers engaged in vegetable and poultry production.

C. CASE STUDY ON VEGETABLE PRODUCERS IN BARANGAY CATTUBO, ATOK, BENGUET PROVINCE

1. GENERAL

The 2002 Regional Development Report revealed that the incomes in rural areas are improving, from an average family income of PhP52,841 in 1991 to PhP64,969 in 2000. However, the National Economic Development Authority admitted that income distribution is not getting any better (NEDA-RDR, 2003). Furthermore, the gap between the incomes in urban and rural areas have remained more than twofold. The income profile by decile groups show that the mean income of families belonging to the 10th or highest decile group

⁹ Ibid.

was more than ten times higher than that of families belonging to the 1st or poorest decile group, with PhP312,633 mean family income and PhP20,789 mean family income respectively (NEDA-RDR, 2003).

One major source of income in the region of this case study is the vegetable industry. The vegetable industry, for many years, has been the top peso earner in the region. The province of Benguet has been the main supplier of the vegetable needs of the whole country. In the first half of 2002, Benguet province was supplying 80% of the country's total vegetable consumption. The later half of the year showed a drastic change because of massive vegetable importation.

The vegetable industry has been considerably weakened with the implementation of the Agreement on Agriculture. This was admitted by the Department of Agriculture when it said that high value crops like potato and cabbage will have an uncertain future due to import competition. The effects of the once hazy and seemingly unknown phenomenon of liberalization were widely felt by the vegetable producers in the year 2002 when there was a sudden drop in vegetable prices.

The story of indigenous rural farmers in barangay Cattubo, Atok municipality, Benguet province is representative of what has happened in various vegetable growing areas in the region.

This case study sought to answer two main questions: firstly, to examine the effects of the globalization processes (which includes trade liberalization) on the income, prices, markets and livelihoods in Barangay Cattubo, Atok, Benguet province; and secondly, to assess how globalization has affected the achievement of the CHARM Project, whose main aim is to alleviate poverty.

2. METHODOLOGY

This study utilized the “before” and “after” framework of analysis. The “before” time frame refers to the period before the July 2002 vegetable importation. The “after” refers to the period after July 2002. This timeframe was chosen in this paper, as the dramatic effects of the liberalization of trade in agriculture was felt by farmers and other stakeholders of the vegetable industry after July 2002.

Barangay Cattubo was the focus of the study because of its long history (going back almost one century) of vegetable production and the level it reached in terms of commercial production. Barangay Cattubo is also the site of certain CHARM activities, namely high value crops and cut-flower production,

Sampling

A roster of farmers in Barangay Cattubo from the municipal agricultural office was the source from which farmer respondents in the barangay were selected. The names included in the sample were chosen on the basis of the following criteria: they are residing in the community at the time of data collection, they have farm lots in the barangay and were willing to be interviewed. Those who were not available for interview or did not want to be interviewed were replaced. 43 respondents were interviewed which represents 10 percent of the farmer population.

Key people who could provide information on the overall farming situation, vegetable trading pattern, CHARM project's services and project implementation were also interviewed.

Data Gathering

Primary data was obtained from the results of the survey done earlier by the researcher. Key informant interviews and in-depth individual interviews with traders, selected farmers and CHARM project personnel were conducted. Secondary data sources used were the Barangay Natural Resources Management Plan (BNRMP) prepared by the NGO component of the CHARM project in barangay Cattubo, other CHARM project documents, data from the Municipal Office and documents on vegetable importation by the Anti-smuggling Task Force in the Cordillera region.

3. PROFILE OF BARANGAY CATTUBO

General

Barangay Cattubo is an indigenous peoples' community. It is one of the major producers of highland vegetables or what is popularly referred to as 'Baguio vegetables'.

It is one of the eight (8) barangays of the Municipality of Atok, province of Benguet. It is located at the Northern part of the Municipality, sharing boundaries with Buguias on the North and Kabayan on the East, both of which are Municipalities of Benguet. Barangay Pasdong and Madaymen, Kibungan bounds Cattubo on the west and Paoay bounds it on the south. From Baguio City, the place can be reached after two and a half (2 ½) hours travel time.

The research site for this study considered representative respondents from all the six sitios of Barangay Cattubo, namely Calasipan, Apanbirang, Timbac, Tulodan, Botiao, and Oyusan.

The barangay is located 55.6 kilometers from Baguio City, 49.5 kilometers from the Provincial capital of La Trinidad and 5.5 kilometers away from the Municipal hall at Sayangan. Since the Halsema traverses the barangay, the area is accessible to all kinds of transportation facilities. Buses plying the Bontoc-Cervantes, Lepanto and Buguias routes are available daily.

The municipal office data recorded that Cattubo has a total land area of 2,414.12 hectares. A recent household survey recorded a population of 2,387 with 471 households. (CHARM-BNRMP, 2002).

The barangay lacks infrastructure services like electricity, water and access roads, so the majority of the households do not have electricity and water facilities. The access roads are dilapidated and are passable only during the dry season.

The barangay is basically an agricultural community that is oriented to cash crops production. Fifty percent (50%) of the agricultural lands are not irrigated.

Agriculture is the main source of income of the people who grow various ornamental and vegetable crops which they sell in Baguio and La Trinidad. They also raise livestock and poultry but on a limited scale and these are usually for home consumption.

People

Most of the population belong to the Kankana-ey and Ibaloi ethnolinguistic groups, who are the original inhabitants of the community. In 1998, Barangay Cattubo had a registered total population of 2,140 with 1,136 males and 1,004 females in 368 households (MHO's Actual Survey). Currently, it has a population of 2,387 and 471 households. It is composed mainly of young people between 0-34 years old; there are 965 young dependents belonging to the 0-14 age group, 1332 belonging to the labor force and 1,300 who are respectively active. Only 90 individuals belong to the 60-75 age group.

There are three major languages spoken in the barangay, namely Kankaney, Ibaloi, and Ilokano. Kankanaey dialect is the most spoken dialect of 1,205 households, Second is Ibaloi with 1,110 households; and Ilocano is the least dialect spoken in the barangay with 21 households using it.

Socio-economic and cultural situation

Farming is the major source of income. Major crops grown in the barangay are cabbage, potatoes, carrots, green peas, radish and celery. Off farm activities are small business enterprises such as repair shops, vulcanizing, restaurant and sari-sari stores. Other sources of income also include formal employment. Livestock and poultry are also grown generally for home consumption. Only a few households raise cow or cattle, carabaos, ducks, goats and geese.

Being a community of indigenous peoples, Cattubo still holds on to certain functional indigenous traditions and beliefs. Despite the fact that Barangay Cattubo has been fully integrated into the market economy, it has managed to maintain certain indigenous socio-economic and political practices. As a farming community that engages in a highly labor intensive vegetable production, the *gammal* or *aduyon*, a form of mutual labor exchange is still functional. *Pakde*, an indigenous ritual for good harvest is still practiced especially when there is continuous crop failure. The *kapia* or the belief that people should establish harmony not only with others but with nature and the spirit world still finds its way into the lives of a significant number of the population. The *tongtong*, a traditional justice system and conflict resolution mechanism, likewise persists.

Table 6: Sources of Income of Respondents

Source	Household Head	Spouse	Other Members	Total
Farm	387	266	23	675
Off farm (Industry)	25	116		149
Non farm (Prof)	-	7	8	15

Land Use and Classification

Most (or 41%) of the land in Cattubo is used for agriculture, 17% is used as residential area; 13 % as pasture land; 8% is categorized as institutional land and 6% is identified as rivers and creeks. Almost all the active agricultural land is used for vegetable farming, with a little of the remainder planted with fruits. The terrain of the area, which covers 2414 hectares, is either hilly (40%) or mountainous (60%).

Social Services

Barangay Cattubo has 15 types of business establishments distributed in the 5 sitios of the barangay. A business enterprise such as sari-sari store, 2 cooperative stores, a bakery and 2 restaurants. All business establishments except for the cooperative stores are privately owned. As for educational facilities in Cattubo, there are at least 3 Day Care Centers, 1 primary school and 2 elementary schools. All but Timbac Day Care Center are public institutions. 18 teachers are assigned in these public schools. It has only 1 Health Station located at Sitio Timbac. However, the building is not being used because the midwife serving the whole barangay holds office at the Barangay hall at Sitio Tulodan.

Vegetable gardening in the province started in late 1930s after roads were constructed by a Turkish national named Cairus who was able to get a concession to log the forests. By 1946, a certain Alfredo Alumno, one of the first settlers in the sitio started vegetable gardening at Calasipan and he was the first to produce potatoes in the barangay in 1948. That same year, a farmers' organization was also formed to help in the marketing of vegetables to Manila. It was also during this time that farmers started "terracing" the mountainsides to make them into "uma" (garden). To improve literacy of children, Mr. Malameon established the Calasipan Elementary School and in 1952, adult education classes were also being conducted in the barangay. The Tulodan Elementary School was only established year later in 1968.

In 1955-1957 the road from Halsema to Tulodan was made and migrants from Pasdong started vegetable gardening at Calasipan, Oyusan, Timbac and Apanbirang. It was also that time that Chinese migrants started to rent lands for vegetable gardening. The three important crops raised were white potato, cabbage and carrots. Other crops grown are celery, Chinese cabbage, sweet potato, ornamental crops and gabi.

Respondent' profiles

The study interviewed 43 respondents, which constitute 10 percent of the population of farmers in barangay Cattubo. The barangay has a long history of vegetable production for cash despite the limitations posed by the climatic and geographical terrain as well as lack of basic social services like irrigation. Table 7 provides information on the profile of the respondents.

TABLE 7: SOCIO-ECONOMIC PROFILE OF RESPONDENTS

CHARACTERISTICS	NUMBER	PERCENTAGE (%)
SEX		
Male	23	53.5
Female	20	46.5
TOTAL	43	100.0
AGE (Years)		
20 – 25	2	4.6
26 – 30	2	4.6
31 – 35	6	13.9
36 – 40	8	18.6
41 – 45	6	13.9
46 – 50	12	27.9
51 – 55	4	9.3
56 – 60	2	4.6
61 – 65	1	2.3
TOTAL	43	100
CIVIL STATUS		
Single	0	-
Married	43	100
Separated	0	-
Widow/Widower	0	-
TOTAL	43	100
EDUCATIONAL ATTAINMENT		
No Schooling		
Primary	1	2.3
Elementary Level	1	2.3
Elementary Grad	10	23.2
High School Level	13	30.2
High School Grad	4	9.3
College Level	8	18.6
College Grad	2	4.6
Vocational	3	7.0
	1	2.3
TOTAL	43	100

4. CURRENT SITUATION AND RECENT TRENDS

Current Situation

Indigenous communities that have already been integrated into the cash economy experience have borne the harsh impacts of the liberalization of agriculture (Rovillos et. al., 2001). This is illustrated in the case of the vegetable industry in Benguet where the high value crops which gained her the title “salad bowl” of the country may yet become a ‘sunset industry’ in the history of Philippine agriculture. High value crops such as carrots, potatoes, asparagus, broccoli, cabbages, green onions, garden peas, lettuce, radish and cauliflower have always occupied the top priority list in the country’s agriculture department. The potato, for example, has been promoted as a ‘banner crop’ in the region, even on the eve of the liberalization policy. Yet with the liberalization policy, even the Department of Agriculture admitted that the same high value crops (potato, garlic, onion, and cabbage) are ‘threatened crops’ under the policy.

In July 2002, the vegetable farmers were shocked when imported carrots swamped the Manila market. Immediately, 250,000 farmers in the province and some 400 traders at the local trading post in La Trinidad municipality felt the direct impact of vegetable importation. By August, the provincial government declared a ‘crisis’ in the industry. Traders claim that the price of carrots dropped at a low P7 which is very unusual at a time when non-stop typhoons and monsoon normally trigger prices up.

Trends in vegetable importation and smuggling

The Philippines is importing around 40 kinds of fresh/chilled/diced vegetables and about 16 of these are vegetables produced in the Cordillera region, specifically Benguet province. These include cabbage, cauliflower, broccoli, potatoes, raddish, celery, lettuce, cucumber, asparagus, carrots, Chinese cabbage, beans, wongbok, sweet peas, chayote, bell pepper, cucumber, to name a few. A listing of some imported vegetables is shown in Table 8.

The volume of importations is so voluminous as to far surpass the total production of local producers. For instance, the onion-growing province of Pangasinan pegs 11,027 mt production compared to the 10,690 mt of imported onions from China in 2001. Similarly, cauliflower and broccoli imported from Singapore in 2001 registered a 5,418 percent increase in volume from year 2000. A 2,364 percent increase in the importation of cabbage from China between 200 and 2001 is also significant (Lacuarta, 2002).

Table 8: Philippines: Fresh Vegetable Imports, 2001-2002 (Volume in kilograms)

Item	2001	2002	% Change
Onions, in quota	16,476,168	6,602,175	(59.9)
Other vegetables , n.e.s.	129,579	1,814,076	1,300.0
Cauliflowers & headed broccoli	309,590	609,724	96.9
Lettuce, other than sub-item 0545401	369,197	215,333	(41.7)
Cabbage lettuce (head lettuce)	84,917	171,186	101.6
Cabbage, in-quota	35,742	69,422	94.2
Onions, out-quota	1,163,750	50,000	(95.7)
Asparagus	8,093	3,030	(62.6)
Radishes	3,831	2,998	(21.7)
Spinach, New Zealand spinach and orache spinach (garden spinach)	1,074	2,647	146.5
Beans (vigna spp., phaseolus spp.)	1,617	1,579	(2.4)

Source: National Statistics Office; and some data from Macabasco, 2002.

The quantities of imports of several vegetables have become so huge that in some cases they have exceeded the total production of local producers. For instance, the onion-growing province of Pangasinan had 11,027 metric tonnes of production, compared to the 10,690 metric tonnes of onions imported into the country from China in 2001. Cauliflower and broccoli imported from Singapore in 2001 registered a 5,418 percent increase in volume from

year 2000. A 2,364 percent increase in the importation of cabbage from China between 2000 and 2001 is also significant (Lacuarta, 2002).

At the regional level, the Task Force on Anti-smuggling, which closely monitors the entry of imported vegetables in four entry points in Manila, reported that there was a very significant rise in the volume of imported vegetables (both legally imported and smuggled) during the course of 2002. (See Table 9).

Table 9: Total Monthly Volume of Imports (Legal/Smuggled Vegetables) for 2002

Month	Volume[Kgs]
January	397,018
February	542,522
March	327,543
April	446,696
May	569,639
June	396,872
July	513,763
August	1,100,914
September	1,370,533
October	958,165
November	1,002,973
December	424,208

Source: John Kim Files, (Municipal Councilor & Member, Task Force on Anti Smuggling) 2002.

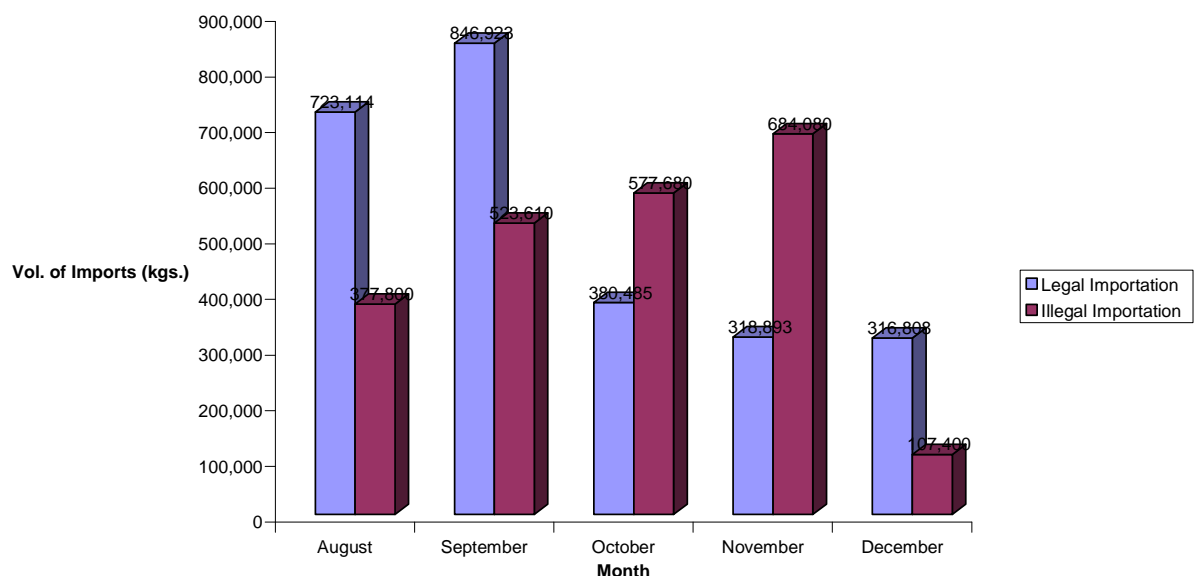
As the Table shows data that has been gathered in only four entry points in Manila area, the figures probably understate the amount of imports. The trend of rapid and sudden rise at the last months of the year is however very clear. There was a doubling of imports from July to August, with the very high level continuing in September to November.

Farmers and traders alike identified the government's policy of liberalization of the agriculture sector as the main factor in this rapid increase in vegetable imports, which in turn caused the extremely low price levels.

A further complicating factor is the entry of illegally imported vegetables. Local officials in the province of Benguet, Mountain Province and local officials elsewhere pointed out that the illegal entry of smuggled large volumes of vegetables is another development which further weakened the vegetable industry. Certainly, if one looks at the volume of illegally imported vegetables, one can not ignore the fact that at particular months, smuggled vegetables even surpassed the volume of legally imported ones. This is very clear in the graphs below. Note however that the data is taken from only four entry points of imports in Manila. As Councilor John Kim of La Trinidad, in Benguet province said, the “entry of smuggled vegetables would spell death to vegetable farmers.”¹⁰ Kim is one of the most active members of the Task Force on Anti-Smuggling, which monitors certain entry points for illegally imported vegetables in Manila.

Chart 1

Bar Graph Comparing Legal and Illegal Importation of Assorted Vegetables for 2002



Source of basic data : Files of Councilor John Kim of the Task Force on Anti-Smuggling (Different importation dates, different importers in 4 entry points of vegetable imports namely Subic Port, Olongapo City, Manila International Container Port (MICP) – Port Area Manila, NAIA – Pasay, South Harbor – MICP)

¹⁰ This comment was made during the interview with him.

Price Trends

Trends in the price of vegetables recorded a steep decline. The monitoring groups reported that in November 2002, cabbages were being sold at P1.50/kg compared to P10/kg a year ago; Chinese cabbage at P2.50/kg; potatoes at P5/kg and carrots at P7/kg. Normally, vegetables command better prices on holidays, however, there was no significant price increase during the long Christmas break both in 2002 and 2003. On December 24, 2002 for instance, there was a sudden decrease in price. By early January of 2003, local traders interviewed said that a repeat of the November 2002 price was being felt. Lettuce which used to sell between P60 to P80 per kilogram at this time of the year was selling an average of only P8/kg. In the Christmas 2003 season, another repeat performance of December 2002 was evident – only this time, the situation was even more pathetic. Truckloads of vegetables were lined up along the highway for days untouched and so were those which were just displayed in front of the trading post. When the farmers were interviewed, they said that there would be no traders or wholesalers around. Normally it is during the Christmas break when the movement of vegetables in the market is busiest.

Charts 2 and 3 show the prices of vegetables in 2000, 2001 and 2002, and reveal the extent of fluctuations in the prices. It is noted that in 2002 there is steep and continuous decline in price. For the four major crops grown in the research site, for instance potatoes, better price was seen in year 2000 that picked up between July and August, the season when 'jackpot' price usually happen and then picks up again starting November until January. Here, high price levels were observed in December when the price of potato went up as much as PhP31.26. In a return of investment study done by the Highland Agricultural Resources Research and Development (HARRDEC) in 1999, it was concluded that when the price level of potatoes is pegged at PhP20 a kilo, a 289% return on investment is realized. Obviously, the 31 peso price level in December 2001 is already a jackpot price, so they say. The same is observed in 2001 where price increases were experienced starting in July until the holiday season in December.

Chart 2
Average Price Curve of Different Vegetablesfor the Year 2002 (La Trinidad Trading Post)

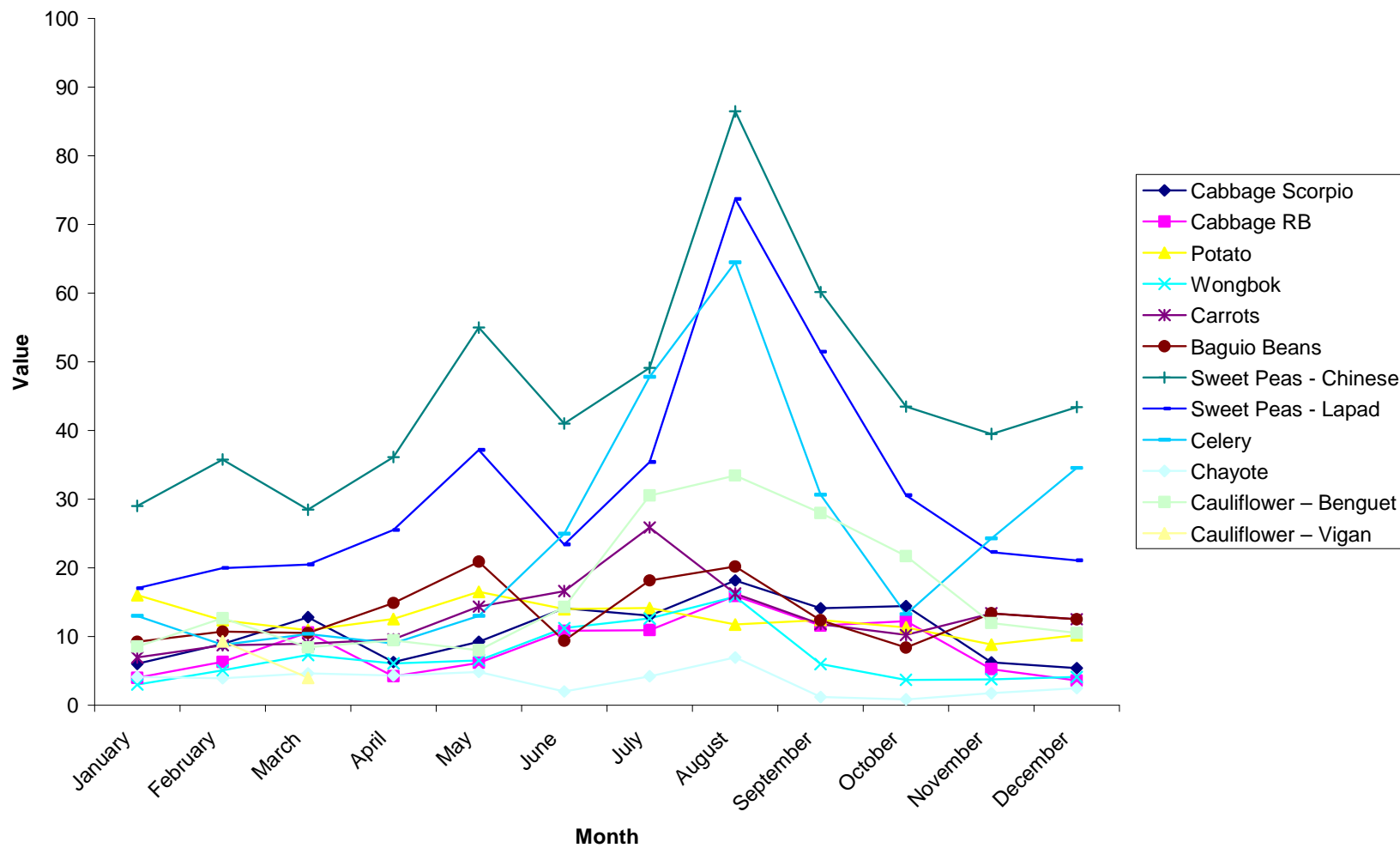
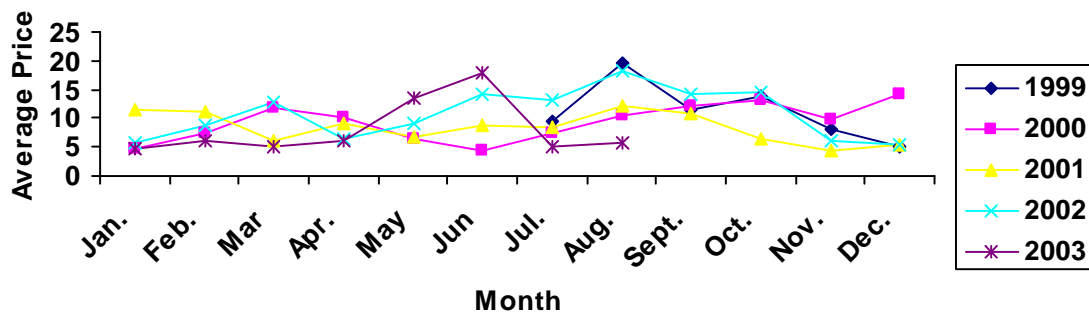


Chart 3

Line Graph Showing the Price Trend of Cabbage Scorpio from 1999 - 2003



Source: DA-CHARM Project-Agribusiness Unit. 2002.

5. IMPACT OF LIBERALIZATION

This section discusses the impact of globalization and liberalization on vegetable farmers in barangay Cattubo in the municipality of Atok, Benguet.

(a) Decreased incomes and sustained losses

The cash flow in the household is usually a good indicator of the economic situation within a household. In the study, the respondents were asked about their gross income per cropping 'before' and 'after' the liberalization of vegetable imports. As noted earlier, the 'before' time period covers the cropping calendar that is prior to July 2002 and the 'after' period refers to August 2002 onwards. As shown in Tables 10 and 11, the highest gross income per cropping before importation is recorded at P225,000 with the lowest gross income of P2,500. This is a far cry from the respondent's estimated highest gross income after the vegetable importation which averaged at P75,000.00. 18 persons or 43% of the 42 respondents said that for the second half of 2002 until the present, they experienced income losses, as the prices of their vegetables were so low that for the last three croppings they could only get revenues to cover 35% to 60% of their total expenses. Two of the respondents claim they "broke even." Most of the respondents claim they went 'bankrupt' since year 2002 and that condition has persisted until the present.

TABLE 10: Respondents' Highest Income Before and After Importation

	Before Importation n=42		After Importation n=42	
	Number	Percentage (%)	Number	Percentage (%)
PhP 5,000-10,000	2	4.7	20	47.6
10,001-20,000	7	16.6	11	26.2
20,001-30,000	2	4.7	6	14.3
30,001-40,000	5	11.9	4	9.5
40,001-50,000	10	23.8	-	
50,001-60,000	-		-	
60,001-70,000	5	11.9	-	
70,001-80,000	2	4.7	1	2.4
80,001-90,000	-		-	
90,001-100,000	2	4.7	-	
100,001-110,000	3	7.1	-	
110,001-120,000	1	2.4	-	
120,001-130,000	2	4.7	-	
130,001-150,000+		-	-	
220,001-230,000	1	2.4	-	
TOTAL	42		42	

TABLE 11: Respondents' Lowest Income Before and After Importation

	Before Importation n=42		After Importation n=42	
	Number	Percentage (%)	Number	Percentage (%)
Income loss	1	2.4	17	40.47
Break-even			2	4.76
PhP 5,000-10,000	10	23.8	10	23.80
10,001-20,000	13	30.9	11	26.19
20,001-30,000	14	33.3	2	4.76
30,001-40,000	2	4.8		
40,001-50,000				
50,001-60,000				
60,001-70,000				
70,001-80,000	1	2.38	1	2.38
TOTAL	42		42	

Many respondents also claimed that they are still paying previous loans incurred. The prevailing system is that the capital for vegetable farms is dependent on loans. Previous studies show that potato production for instance is debt-dependent since it is heavily capital-intensive. This situation has become fertile ground for unethical marketing and lending practices. Loan sharks are waiting to pounce on farmers who desperately need capital.

In spite of this situation, the farmers still continue producing, hoping that they will be able to hit the 'jackpot price'. 'Jackpot price' for farmers would mean profiting by more than double the investments. Vegetable farming is considered to be "*tsamba-tsamba*" or a game of chance. You lose today but tomorrow if you are lucky you will hit the jackpot. A considerable number of rural farmers in the research site continue investing in the industry, expecting to at least recover from the crisis. Two respondents intimated that they borrowed from their suppliers the second time around, even at a high risk, because they are still hoping that their luck will change.

The data show that since the huge inflow of vegetable imports in July 2002, farm income has not been enough to meet the basic needs of the household. When asked what caused this, the respondents pointed to the vegetable importation. Three key informants said that before the 2002 influx of imports, even if they went through a period where prices went down, the next cropping promises better prices and in their experience, almost always, income losses are offset in the next cropping seasons. They also say that before, farmers can predict price fluctuations and they were able to master ways to cope with this. They said that at no time in the history of the vegetable industry did they go through such an experience where prices were 'abnormally low' for more than a year up to the present. They expressed the need to look for 'alternative income sources' but there is hardly any other option for them. Those who tried to look for other livelihood sources failed.

These findings are consistent with the reported performance of the agriculture sector by the National Economic Development Authority (NEDA) for 2002 – which highlighted a "negative 3% in performance of semi-temperate vegetables and fruits grown in Benguet and Mt. Province." (NEDA-RDR, 2002).

(b) Effects on the CHARM Project

The key goal of the CHARM project is to:

"..increase average farm family incomes from about 21,200 ¹¹ to at least PhP56,000 by the year 2006 in real terms, and so reduce the number of families below poverty line in target municipalities from 33,000 households to about 12,000 households (or from 70 percent to not more than 25 percent)."(CHARM Proposal, 1995).

¹¹ In 1995 US\$1 was equal to PhP25 and so the conversion for these amounts is that 21,200 pesos is \$820 and 56,000 is \$2,170.

Project documents also show in their indicative survey that the average asset value of 28 households surveyed is PhP16,100 and the average outstanding balance/borrowing per household is PhP8,300. The average household liability balance amounts to P12,400, which is roughly 40% of annual income. Clearly, these households are debt-ridden.

The CHARM project document concluded that the income flow is very inadequate to generate durable household assets, that is lift the household beyond poverty. (CHARM Project Document, Jan 1996). The CHARM project interventions which should directly or indirectly result in an increase in incomes have in fact not succeeded. Indeed, in this village about 60% of the farmer respondents claim they have not heard of or seen any CHARM project in their community.

In other areas where CHARM has had more visibility, the farmers have shared the same fate after the importation of July 2002. Although they may be a little bit better off compared to farmers in the other areas, they have also experienced adverse effects of the importation. They also have left their vegetables to rot in the gardens or in the highways. The CHARM NGO component report of the Barangay Natural Resource Management Plan [BNRMP] in 2002 reported a monthly family income of PhP2,000 to PhP3,000 or a yearly average income of 24,000 to 36,000, which is far below the CHARM project target of PhP56,000..

(c) Production and Expenditure Patterns in Barangay Cattubo

An analysis of the production-consumption patterns of Cattubo respondents shows that income derived from farming has to be allocated between consumption expenditures and production and marketing costs. Production costs are usually met through loans from creditors. In a study conducted by the Cordillera Studies Center in selected communities in the Cordillera region in 1994, it was illustrated that there is an essential difference between employment as a source of cash and farming as a source of cash. Cash received from employment is disposable income which is allocated between consumption expenditures and saving. In contrast, cash receipts of farming households from sales of produce have to meet both production/marketing costs and consumption expenditures (CSC, 1994).

Other sources of income are essential, then, if a farming household is to sustain itself. In this study, it was revealed that households that solely depend on farming are very vulnerable to the behavior of the market. Cash generated from farming has to be allocated as capital for the next cropping, as current expenses on food, loan payments, education and health expenses, etc. In fact, food and capital for the next cropping compete with each other. Loan/debt payments have also been consistently identified as priority expenses. Another problem articulated by the respondents is the price increase in chemical inputs which had been skyrocketing. A study conducted in 2000 on the prices of commercial inputs in major farm suppliers along the Halsema stretch reveals that the price increase ranged from 1% to 150%. (Sidchogan-Batani, 2000). The Fertilizer and Pesticide Authority [FPA] admitted that agricultural input prices have increased, thus negating the promise of lower prices as a result of liberalization (Arao, 1999).

TABLE 12 : Ranking by Respondents of Priority of Items of Household Expenditures

Respondent #	food	Clothing	Shelter	Health	Agricultural inputs	Education	Lease of land/ land rentals	Payment of loan interest	Payment of labor cost	investments	Other expenses
1	2	4	5		3	1					
2	1	4	7	3	2	6		5			
3	2	3	4		1						
4	1	3	4	6	2	5					
5											
6	2	6	7	5	1	3	8	4			
7	1	2		3	4						
8	2	5			3	4		1			
9	1	5			2		3	4			6(church)
10	1				2	4		3			
11	1	3		2	5	4		6			
12	2	5		6	3	1		4			
13											
14	1	5	6	3	8	2	9		10	4	7(rain burst)
15	1	6	2	5	4	8	3			7	
16	1	7	8	4	3	5		6		7	2(electricity)
17	1	4	2	3	6	5	7	9	8	11	10(electric bills)
18	1			3	5	2			4		
19	1				2						
20	2				1						
21	1				2	3		4			
22	1	6		4	3	2			5		

Source: Data obtained from interviews with 22 of the respondents

The situation for households with ‘other sources’ of income like spouses having fixed income from employment, show an expenditure pattern where items such as education and health are not affected. Indeed, income derived from employment is ‘disposable income’ for consumption expenses and savings.

The income of Cattubo respondents are low, to begin with. For instance, data from the Municipal Agricultural Office show that the income ranges from P2001.to P3,000 (BNRMP, 2001).

(b) Inability to Compete

The ability of the household to participate in the market as well as the ability to have access and control over commercial production inputs are very important in any community integrated into the market economy. Data reveal that both of these capacities have diminished in recent years. The farmer respondents used to market their products in La Trinidad Trading post and Baguio City, the nearest market outlets for their vegetables. However, because of the drop in the prices of vegetables, the respondents say that on many occasions they were forced to dump their carrots and potatoes along the highway, or they just left their crops to rot in their vegetable farms. The practice of allowing crops to rot on the field or to dump them along the highway en route to the market is common during periods of low prices, as transporting them to the market would mean more losses. Farmers now talk nostalgically of ‘better times’ in the past, even when in these past times the farmers ended up as ‘price takers’ in the complex and layered market chain.

Respondents say that previously, even before their products would reach the trading post, they used to be intercepted by company or trader agents or ‘*harang boys*’ who provided market information which they could use to negotiate for better prices. At other times, where a supplier came in between the farmers and the market agents, the supplier picks up the product of the farmer and handles the marketing. The Benguet vegetable farmers, who are at the end of the complex market chain, admit that get very little profit in the marketing of their products. They have been at the mercy of middlepersons and the Chinese syndicates who are in control of the vegetable markets in Baguio and in Manila.

After July 2002, things have become worse. The continuing existence of this almost century-old industry is seriously threatened by import liberalization. There are more frequent scenes of vegetables being dumped along the major highways in the province. Piles of vegetables are stacked up along the highway, with neither agents, traders nor even suppliers to be found.

The experience cited earlier during the recent Christmas season (2003), when filled-up vegetable trucks were lined up for days near the entrance of the trading post, unattended to, is an indicator of the gravity of the situation. Immediately after July 2002, when the import liberalization took place, about 400 traders at the local trading post in La Trinidad municipality, the nearest vegetable trading complex for vegetables, publicly expressed their anger. Around 250,000 vegetable farmers in the province were facing a very unanticipated and uncertain situation. By August 2002, the provincial government of Benguet declared that there was a ‘crisis’ in the

vegetable industry. Since then, the movement of vegetables in the market slowed down or even intermittently stopped.

Two of the 42 respondents who seem to have thorough knowledge about the ‘liberalization policy in agriculture’ say they no longer expect good or even fair prices for their produce, as imported vegetables are sold at a much cheaper price compared to the locally produced vegetables. The respondents were quick to add, however, that locally produced vegetables are ‘safer to eat, and more delicious.’ Indeed, price monitoring of imported vegetables reveal that their prices are 30 to 50 per cent cheaper than locally produced vegetables (Business World, 2002).

Table 13 and Chart 4 show that in recent years, the prices of vegetables have steadily gone down. To this, the farmers say, “*makapa-awan ganas*” and “*kasasadut*” or there is no more incentive/enthusiasm to plant again. In fact, five of the respondents no longer planted for the last two croppings and gave the reason that with a prolonged price crisis brought about by importation, it is no longer viable to plant vegetables. Another respondent say that before, his attitude was to keep on planting, high or low price – with the end view that at one cropping or another, he will chance upon a ‘jackpot price.’ Today, this farmer says he is not hoping anymore as prices are no longer ‘fluctuating’ but are consistently dropping.

Interview data with a former Syngenta Marketing Specialist cited that their company, in an effort to maintain its sales of farm inputs to vegetable farmers, conducted a feasibility study of linking farmer-clienteles of Atok and Buguias to possible consumers in the Manila market. The conclusion reached is that this ‘Market Links’ scheme is not feasible. This is because Benguet farmers, can not assure the volume, speed and quality requirements. He further added that these farmers being linked with the Manila market, are even the big and wealthy and ‘most favored’ farmers of Benguet.

One can already see that the importation of vegetables bring about ‘exclusion’ of small, even big farmers as they can no longer meet the market demands. Perhaps, this is the reason why Secretary Lorenzo of the Department of Agriculture, during the Regional Vegetable Congress in November 2003, emphasized this point when he pointed out that “in a competitive world, one needs to be exact... otherwise, we get eased out in the process.”

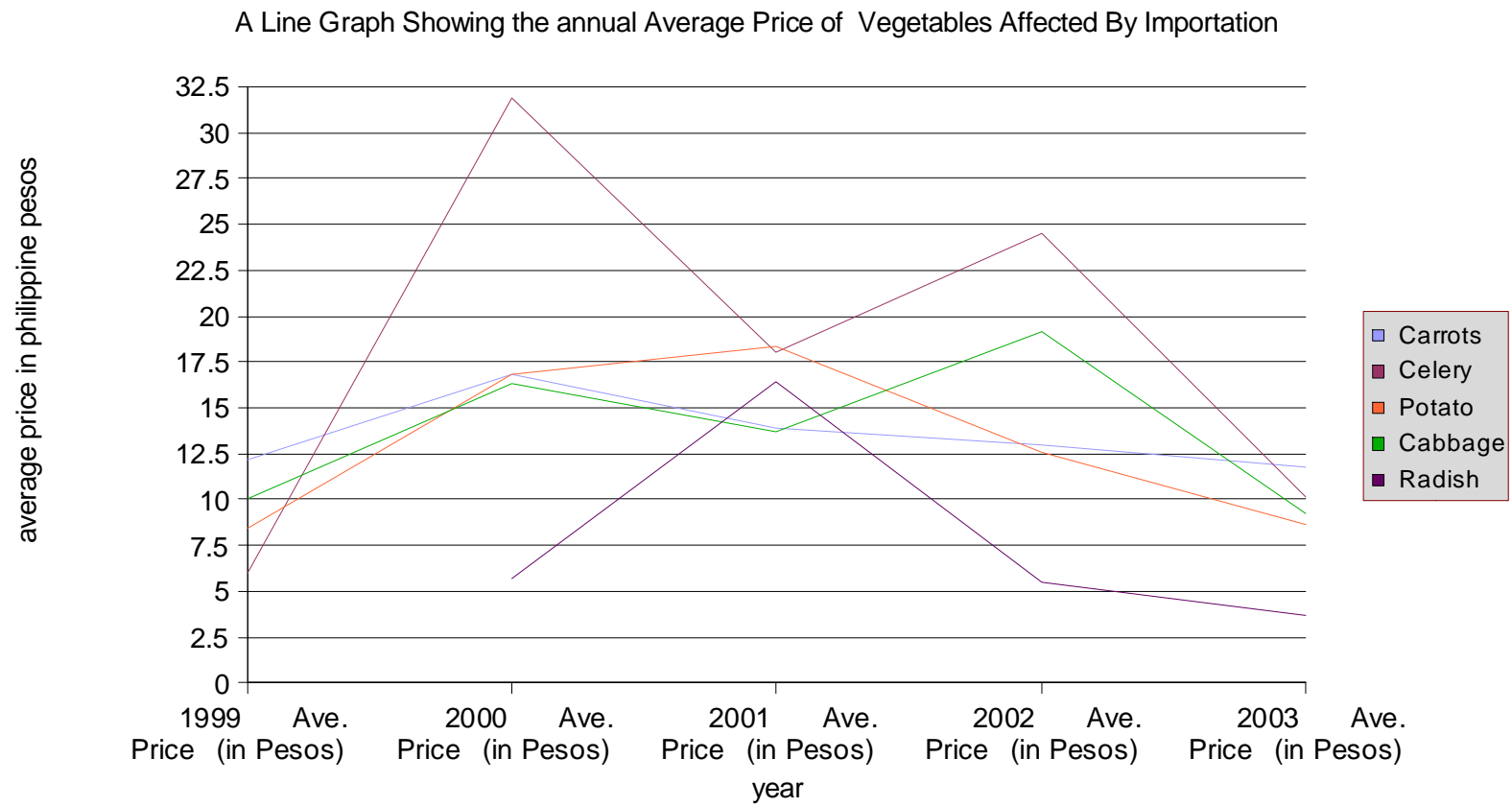
Highland vegetables used to be competitive in the market. A case in point is the potato which is one cash crop which has been considered to be a competitive rootcrop both in the developing and developed countries. In the Philippines, potato farmers grossed PhP111,648 per hectare with an average net income of PhP40,299 per hectare or a net profit of PhP0.92 for every peso of investment (Bureau of Agricultural Statistics, 1996). This is the reason why potato was declared as one of the so-called key commercial crops for the country’s Department of Agriculture 1993-1998 Medium Term Agricultural Development Plan and was again promoted as a priority national commodity under the Key Commercial Crop Development Program (KCCDP) and a ‘banner crop’ in the Cordillera region in year 2000. This is not the case now.

Table 13: Major Crops Grown in Barangay Cattubo Showing Price Trend As Against Volume Imported (2000-2003)

Commodity	2000		2001		2002		2003	
	Volume [Kgs]	Ave.Price [in Pesos]	Volume [Kgs]	Ave.Price [in Pesos]	Volume [Kgs]	Ave.Price [in Pesos]	Volume [Kgs]	Ave.Price [in Pesos]
Carrots	89,836	16.84	31,956	13.90	646,966	12.93		11.79
Celery	17,140	31.84	24,105	18.00	5,511	24.50		10.14
Potato	40,301,438	16.86		18.327		12.57		8.65
Cabbage	21,526	16.32	35,742	13.73	69,422	19.13		9.24
Radish	2,767	5.75	3,831	16.42	2,998	5.50		3.70

Source of basic data is National Statistics Office

Chart 4



Source of raw data: DA-CHARM Agri-business Unit. 2002

Table 14: Monthly Average Wholesale Buying Price of Highland Vegetables (2002)

Commodity	January	February	March	April	May	June	July	August	September	October	November	December
Cabbage Scorpio	6	8.88	12.81	6.28	9.21	14.1	13.02	18.15	14.08	14.42	6.25	5.39
Cabbage RB	4	6.31	10.6	4.21	6.18	10.8	10.91	15.9	11.6	12.22	5.24	3.59
Potato	16	12.36	10.93	12.54	16.48	13.98	14.13	11.75	12.41	11.32	8.82	10.19
Wongbok	3	5.04	7.30	6.08	6.53	11.23	12.63	15.8	5.98	3.69	3.78	4.08
Carrots	6.95	8.70	8.98	9.58	14.36	16.60	25.86	16.25	11.80	10.22	13.35	12.50
Baguio Beans	9.21	10.71	10.50	14.88	20.89	9.36	18.16	20.20	12.38	8.36	13.35	12.50
Sweet Peas – Chinese	29	35.75	28.45	36.11	55.00	41.00	49.13	86.45	60.13	43.47	39.47	43.38
Sweet Peas – Lapad	17	19.98	20.48	25.50	37.17	23.39	35.38	73.68	51.45	30.56	22.29	21.06
Celery	13	8.80	10.36	9.00	13.00	24.93	47.80	64.45	30.63	13.26	24.29	34.53
Chayote	4.10	3.91	4.61	4.32	4.82	2.01	4.19	6.95	1.18	0.84	1.74	2.48
Cauliflower – Benguet	8.52	12.66	8.40	9.44	8.00	14.28	30.50	33.43	27.98	21.69	11.97	10.50
Cauliflower – Vigan		9.29	4.00									

(c) Decreased Access to Resources

In terms of capital, farmers are categorized as medium to big farmers when they are able to finance their own production and “small farmers” are those that depend on loans to generate produce. The profile of respondents show that almost all of them are considered as “small farmers.” Most of them take part in the *pa-suplay* scheme, which is an informal credit system that binds a financier (so-called ‘supplier’) and a farmer (who is being ‘supplied’). The suppliers include fellow farmers (farmer-suppliers), farm produce disposers at the trading post, relatives who may have attained successes in their own farms, or vegetable agents who own vehicles, and other financial lenders who manage commercial farm input businesses in nearby municipalities.

The movement of cash resources through the *pa-suplay* scheme was a normal phenomenon in small farm communities like Barangay Cattubo – until the importation of vegetables. Today, capital is no longer as accessible as before. At the onset of vegetable importation, 27 (or 64%) of the respondents claim that they can no longer renew the supplier-supplied relationship even if collaterals are offered since previous loans have not been settled and the suppliers themselves no longer have surplus resources for lending. Even the other 8 (or 19%) of the respondents who were able to borrow once, were no longer able to renew their loans, though part of the reason is they are now apprehensive about borrowing. Before the importation, however, their ‘suppliers’ were more aggressive in taking risks by renewing the loan even if previous loans are not yet paid. After the importation, however, the movement of financial resources seems to have stopped.

TABLE 15: Number of Times Respondents availed of loans

Number of times loaned	Before Importation n=43		After Importation n=43	
	Number	Percentage (%)	Number	Percentage (%)
Never	11		29	
Once	12		8	
Twice	7		2	
Thrice	5			
Four times	4			
Five times	1			
Always	3		2	
TOTAL	43		40	

TABLE 16: Respondents' Major Source of Income

Source of Income	Before Importation n=43
Vegetable Farming	43
Por dia	13
Formal Employment	2
Laborer	5
TOTAL	63*

* Total is higher than number of persons due to multiple responses

Table 17: Other Sources of Income of the Household

Source	Number
Livestock raising	1
Business (store)	2
Barangay Tanod	2
Barangay Kagawad	2
Kontrata	8
Toy making	1
TOTAL	16

When crops fail, a ready alternative source of income is the *por dia* (daily waged labor). The practice of resorting to *por dia* is common, prior to the importation of vegetables. This is because for immediate purchases like food and kitchen needs, the respondents always resort to engaging in piecework, daily wage, or contract work for ready cash. The *makipordia* usually, a woman's domain, as one adaptable strategy after crop failure, worked well for some. However, for other respondents they do not see this as permanent solution but a temporary one to fill the gap especially for food needs. As one woman respondent stated, "*ta wada adi di ipakan ko sin pamilyak*" (to have money for food for the family).

Today, however, with the vegetable importation and the persistence of low price for highland vegetables, members of farm households who used to sell their labor through *por dia* no longer

find it easy to do so since every one seems to be limiting the outflow of their own cash resources. To make matters worse, the absence of other skills and absence of a high-school diploma make it more difficult for them to find other livelihoods. The harshness of the climate in the research site is another limitation. Root crops can be planted, and five of the respondents allot certain parcels of their lands for sweet potato and taro. However, because of the very cold climate, the harvest comes only once a year. The planting of root crops as an alternative to rice therefore is said to be insignificant.

Respondents with spouses or children who have formal employment other than farming tend to have easier access to resources like capital hence do not need to borrow from financiers. The importance of the households having “other sources of income” can not be overemphasized. As shown in Table 18, five of the respondents have household members who are employed – one is an overseas contract worker, the other two have spouses and children working as teachers, respectively; another has a spouse working as a staff of the provincial government, another has a spouse working as a local government official and the other is a storeowner that is a family enterprise. For this group of respondents, the availability of disposable incomes seemed to encourage them to stick on to farming.

(d) Food Insecurity, Diminishing Health and Education Expenditures

The social effects of the decreased income are seen in the Table 19. of rural households. Barangay Cattubo is not a rice farming community – hence it buys its rice supply outside. This means that if cash runs short, food runs out. Table 13 on the ranking of budget allocation based on priority expenditures shows that food and commercial farm inputs compete with each other.

If a household allocates more budget for food, then there is less cash allocated for other items like health and education. This is found to be true in this case study as it was found that education and health was sacrificed. While this phenomenon might have been present with or without importation of vegetables, it was clearly pointed out by the respondents that due to the instability of income caused by the surge in vegetable imports, education is all the more sacrificed. Table 19 shows that about a fourth of the respondents claim they will no longer send their children to school next school year; while five respondents claim their children already dropped out from schooling since the previous school year.

The main reason provided by respondents for the increased incidence of children skipping schooling is that they have been facing increased financial difficulties ever since the import surge in vegetables. Data at the regional level corroborates the above scenario in barangay Cattubo. The share of the poorest families to total income and expenditures has not improved between 1988 and 2000. In 1988, families belonging to the first to 4th deciles (i.e. the poorest) had shares of total regional income and expenditures which were only 17% and 19% respectively. By 2000, these shares further decreased to 13% and 17% respectively. Moreover, some 100,698 families live below the poverty threshold and some 49,573 families still live below subsistence. (NEDA-RDR, 2002).

TABLE 18: Answers of Respondents as to whether they send school-age household members to school before and after vegetable import surge

Answer	Before Importation n=43		After Importation n=43	
	Number	Percentage (%)	Number	Percentage (%)
Yes	30	70	23	53
No	13	30	20	47
TOTAL	43		43	

TABLE 19: Reasons Why Respondents stopped sending their children to school.

Reasons	Before Importation n=13		After Importation n=20	
	Number	Percentage (%)	Number	Percentage (%)
No money	3	23	5	25
Income is not enough	5	38	7	35
Decrease in family income	5	38	8	40
TOTAL	13		20	

The quantifiable indicator set by the CHARM project on the other hand was quite different. The project states that the number of families living below poverty line in target municipalities will be reduced from “33,000 households to 12,000 households.” (Sunstar, 1997; Zigzag, 1997, CHARM Proposal 1995). Local dailies cited this quantification as a result of the government’s Minimum Basic Needs [MBN] survey which pegged the monthly income for a family of six

This grim picture in the education sector is similarly reflected in the expressed view that expenditure for health and wealth is secondary in the listing of priorities, since earnings from the farms are saved as capital for the next cropping, while money for food needs as well as education and health have to be earned elsewhere.

The data show that a majority of the respondents claim that they have consulted health care providers at one time or the other [doctors in nearby public hospital including the city of Baguio, nurse and midwives]. Upon closer look, however, data show that farm inputs and food needs are priority items for the household. Further investigation gave the information that health and

wealth ‘savings’ are sidelined as second or third priorities so long as they have ‘farm needs’ and food provision for the family. The “farm needs” include pesticides and farm equipment

D. CASE STUDY OF THE EFFECTS OF GLOBALIZATION AND TRADE LIBERALIZATION ON THE POULTRY INDUSTRY IN ALAMINOS, LAGUNA PROVINCE

1. OBJECTIVE OF STUDY

The objective of this case study is to ascertain the impact of globalization and trade liberalization on the poultry industry in the Philippines, and the effects of globalization on the economic life of a rural poultry producing community in Alaminos, Laguna. Specifically, this study aims to:

- 1) Ascertain the extent to which changes in the production standards have eroded the traditional dominance of backyard, free-range poultry farming engaged-in by smallholders and how economic benefits have shifted to the integrators, big traders and contract growers.
- 2) To determine how employment has been affected by this shift.
- 3) To document the impact of the liberalization of the poultry industry on the different players in the sector and see whether globalization and trade liberalization has mitigated rural unemployment and poverty.

Table 20: Production of Chicken compared with other Major Agriculture Products ('000 Metric Tonne), 1997-2001

ITEM	1997	1998	1999	2000	2001^P
Coconut	13,707.8	12,806.4	12,505.0	12,994.7	13,207.8
Sugarcane	22,273.1	17,333.4	23,777.8	24,491.0	24,961.7
Banana	4,407.7	4,106.7	4,570.6	4,929.6	5,060.8
Pineapple	1,616.1	1,575.1	1,565.9	1,559.6	1,617.9
Coffee	130.0	122.2	117.4	126.3	132.1
Mango	990.2	994.0	866.2	848.3	884.3
Corn	4,332.4	3,823.2	4,584.6	4,511.1	4,525.0
Chicken	929.7	919.4	929.2	997.8	1,098.8

Source: Bureau of Agricultural Statistics, Department of Agriculture

^P Preliminary

2. THE PHILIPPINE POULTRY INDUSTRY

After the accession of the Philippines to the WTO and the lifting of quantitative restrictions, importation of frozen chicken, mostly from the United States, went up dramatically. Frozen chicken importation reached a new high of 29,000 tons in 1999. It went down to 11,000 tons in 2001 when the poultry farmers protested. The 2002 importation figure of 16,529 tons was highly understated, according to the Bureau of Agricultural Statistics, since USDA (US Department of Agriculture) figures estimated about 24,000 tons.

The Philippines has experienced a scaling-up of poultry production in the past ten years. There is a steady increase in broiler production peaking at 46 million heads in 1997 and 1998. Broiler production slowed down to 29 million heads and broiler production slowed down to 29 million heads. Broiler production slowly picked up registering 38 million heads in 2003. (See Table 23 below). Production of native/improved variety has been growing, from 46 million heads in 1990 to a peak of 79 million in 1998, then falling to 72 million in 2003.

Table 21: .Total Chicken Inventory By Year and Type

YEAR	BROILER	LAYERS (Foreign Strain)	NATIVE/ IMPROVED	TOTAL CHICKEN
1990	26,564,599	9,813,580	45,923,946	82,302,125
1991	24,529,060	8,330,386	45,380,505	78,239,951
1992	27,355,852	7,406,458	46,762,901	81,525,211
1993	31,172,690	8,601,539	47,383,290	87,157,519
1994	34,771,286	8,342,140	50,087,583	93,201,009
1995	27,884,979	9,364,485	58,966,260	96,215,724
1996	39,311,760	10,795,977	65,674,658	115,782,395
1997	46,558,072	11,465,905	76,938,831	134,962,808
1998	46,386,171	13,169,673	78,964,816	138,520,660
1999	32,719,546	13,366,526	67,702,965	113,789,037
2000	29,023,771	14,913,360	71,249,850	115,186,981
2001	28,958,552	14,866,005	71,781,960	115,606,517
2002	33,149,459	16,775,260	75,805,374	125,730,093
2003	38,148,017	17,706,026	72,340,040	128,194,083

Source: Bureau of Agricultural Statistics, Department of Agriculture

Overall, chicken production posted upward swings. Habito, quoting Rosegrant of IFPRI in Washington (Habito 2002) attributes this to the trend towards increased consumption of meat and meat products in developing countries in Asia. One impetus in the scaling-up of poultry production was the dumping of cheap, subsidized feed grains (corn, wheat, soya) to developing economies. The demand for feed grains has also increased, and with this, the importation of corn, wheat and soya beans, largely from the US.

3. THE POULTRY INDUSTRY IN ALAMINOS, LAGUNA

***The town*¹²**

Alaminos is a fourth class municipality of the province of Laguna as at current classification. It is an agricultural town with 93 % of its agricultural land planted with coconut interspersed with other fruit bearing trees—mostly rambutan and lanzones, and some root crops. It is a heart-shaped town bounded on the north by the towns of *Calauan* and *Bay*, on the south by *Lipa City*, *Batangas*, on the west by *San Pablo City* and on the east by *Sto. Tomas*, *Batangas*. The town is about 70-80 kilometers from Manila passing through the *Daang Maharlika* (Maharlika Highway). It has fifteen barangays or barrios, four of which are classified as urban barangays.

Four rivers drain Alaminos. It has a very low water table making extraction difficult, especially in the dry season. This explains why rice is not grown in the town. A few farmers engage in non-commercial corn production. The town has an estimated population of 39,000. With a population growth rate of not more than 3% per annum, the town's rate lags behind the average growth rate of the province.

Migration contributes significantly to the town's small population growth rate. Hemmed in by two well-developed cities and by the more advanced towns of *Calauan* and *Sto. Tomas*, the more enterprising members of the population prefer to seek better opportunities in these adjoining cities and towns, or go directly to the National Capital Region which is just 70-80 kilometers away.

The main economic activity of the people of Alaminos is coconut production but since the town lacks the facilities and technology to process coconut into copra, coconuts are sold fresh to traders outside of the town or to processing companies in the adjoining cities and towns.

People in the town attribute the relative prosperity presently enjoyed by a significant number of households to migration of family members to Spain, as teachers or domestic help. The poultry industry does not seem to register as a veritable source of economic gain for the town and its people except for minimal real estate taxes, and taxes paid for by contract growers, also minimal.

Historical development of the poultry industry

¹² Information from the *Comprehensive Land Use and Development Plan of the Municipality of Alaminos, Laguna*.

The poultry industry in Alaminos began with backyard poultry production, similar to what went on in other parts of the country, going back to even the pre-World War II period. Individual household raisers used native stocks. Feeding was free-range. The industry developed under a natural economy whose individual producers focused on producing food for the household. The remainder was allocated for food stock, for barter and for occasional cash transactions to purchase matches, table sugar, edible oil, and other stuff needed in the household. Family members usually shared and divided labor equally among them. The whole family was productively engaged in the enterprise with the exception of children still incapable of contributing work. Wealthier families engaged in bigger volume production but the practice did not spur commercialization since majority of the households also engaged in the same enterprise with varying intensities.

This backyard, free-range system still goes on today but apparently much diminished, practiced mainly by the eleven rural barangays for food augmentation.

The emergence of commercial poultry farming in Alaminos

With the advent of the fast foods industry in the late 1960s came the exposure of Filipino consumers to fast foods and the eventual shift in food preference for meat and meat products, particularly broiler chicken. But it was in the late 1980s and early 1990s, when fast foods mushroomed around the Philippines, that great demand for chicken developed. The increased demand for chicken sent the various big players, the integrators, helping to set up poultry farms for would-be contract growers or transforming existing farms into the contract growing setup. It was in this period that commercial poultry contract growing was introduced in Alaminos.

The landed section of the population were able to take advantage of the opportunity, using their properties for loan collaterals in the four rural banks and one commercial bank serving the community. The ownership of the commercial farms have not shifted significantly through the years and remain practically at the hands of those who started in the business. Occasional new names that appear in the registered list usually are renting facilities from the original contract growers.

In 1998, prior to the glut in the market due to increased importation of chicken and chicken parts from the US, Alaminos had 31 registered commercial poultry farms. Presently it has 27 registered commercial poultry farms. Twenty one of these farms grow broilers and two maintain layers. The remaining four farms are engaged in breeders. (See Table 22).

The table shows that the contract growing business in Alaminos is dominated by a few families. These are families and individuals with real estate properties and with access to financial institutions.

Table 22: Poultry Commercial Farms in Alaminos, as at January 2003

	Name of Farm	Farm Location	Poultry Population*	Species	Farm Size (Hectare)
1	Jovita Bigal Farm	San Benito	10,000	Broiler	0.70
2	FD Poultry Farm	San Roque	10,000	Broiler	1.50
3	Najib Tumanes Farm	San Roque	U	Broiler	0.20
4	FG Farm	San Roque	10,000	Broiler	4.60
5	Belen Farm	San Gregorio	37,500	Broiler	0.50
6	Bondad Farm	Del Carmen	U	Broiler	1.00
7	Sergio Agra Farm	Palma	25,000	Broiler	1.60
8	Melycen Faylona Farm	Palma	15,000	Broiler	1.00
9	Rudy Cordero Farm	Palma	10,000	Broiler	1.30
10	Gerry Faylona Farm	Palma	10,000	Broiler	0.50
11	Carolyn Faylona Farm	Palma	30,000	Broiler	1.70
12	Tony Gallivo Farm	Brgy. III	20,000	Broiler	U
13	Melitonia Faylona Farm	Brgy. III	45,000	Broiler	2.00
14	Armando Faylona Farm	Brgy. III	15,000	Broiler	3.00
15	Ramon Sarmiento Farm	San Ildefonso	68,000	Broiler	1.00
16	Lito Cubillejo Farm	Sta. Rosa	1,500	Layers	3.40
17	Antonio Gallivo	San Miguel	50,000	Layers	9.00
18	Teodoro Tolentino	San Miguel	40,000	Broiler	1.00
19	Rolando Tolentino	San Miguel	45,000	Broiler	2.40
20	Marcel Tolentino	San Miguel	50,000	Broiler	1.70
21	Jessie Banzuela	San Miguel	20,000	Broiler	1.00
22	Ramon Sarmiento	San Andres	10,000	Breeder	0.80
23	Virgilio Monzones	San Andres	15,000	Breeder	1.70
24	Edgardo Banzuela	San Andres	40,000	Broiler	0.25
25	Conrado Masa	San Andres	60,000	Broiler	2.5
26	Maynard Monzones	San Andres	10,000	Breeder	2.00
27	Wilfredo Monzones	San Andres	10,000	Breeder	0.50

Source: Municipal Agricultural Office, Alaminos, Laguna.

Note: U—Undisclosed

* Figures on poultry population were taken from existing loads of farm respondents/owners at the time of interview and do not reflect their actual loading capacities nor their annual volume production.

The operation of contract growing poultry farms in Alaminos

The main players in this contract growing industry are the integrators and the contract growers as their junior partners. Minor players are the “viajeros,” small and medium independent producers, and small backyard, free-range growers. Feed grains wholesaler and retailers also figure in the equation, but as minor players, catering to small, independent or backyard raisers. Occasionally, contract growers patronize the local grains wholesaler and retailer when they run out of feeds.

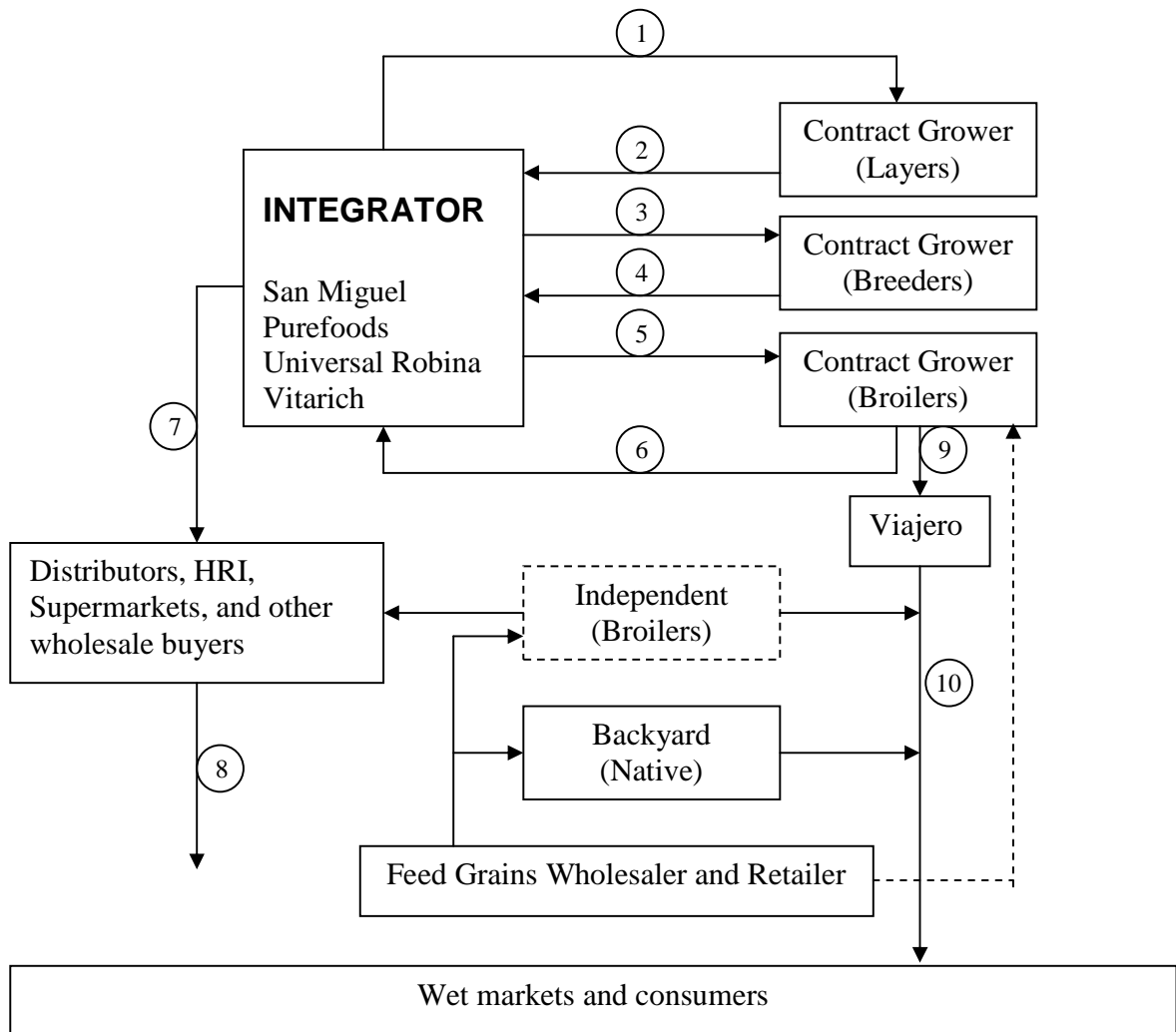
The Chart is a diagrammatic representation of the structure of the transactions between and among the players in the industry.

The roles and relationships between the players and the steps in the chain of activity are shown in the Chart and described below, with the numbers below referring to the numbers in the chart¹³.

1. Integrator loads contract grower; provides feeds and veterinary services.
2. Eggs are harvested by Integrator and pays the contract grower.
3. Integrator loads contract grower; provides feeds and veterinary services.
4. Eggs are harvested and collected by Integrator; pays the contract grower.
5. Eggs from breeders are hatched and DOC provided to contract growers; provides feeds and veterinary services.
6. Broilers are harvested by Integrator; pays the contract grower
7. Integrator sells to distributors, HRI, and wholesale buyers aside from conducting their own distribution to institutional buyers.
8. Broilers and table eggs finally find their way into various markets and consumers
9. What remains of the 90% to 95% take of the Integrator reckoned from the original broiler population is sold by the contract grower to viajeros (traders) for his own use as incentive, on top of his agreed cash share per head from the final broiler population
10. Viajeros, independent producers and backyard farmers sell directly to wet markets.

¹³ Information here and in the Chart was obtained through interviews with contractors.

Chart 5: Roles and Processes involving the Players in the Poultry Industry



The integrator loads each contract growers a quantity from 5,000 to 100,000 birds depending on the capacity and performance record or efficiency of the contract grower, based on criteria set by the integrators. Regardless of the type of birds the contractor grows (which the integrator also determines), i.e., breeder, broiler, or layer, the common practice of integrators is to load the contract grower; provide the feeds for the duration of the 38-day contract; and assign veterinary doctors for weekly checks and weighing of the birds. Medicines and vitamin supplements are put on the account of the contract growers.

The integrator's share in the total production output is 90%-95% of the initial population. The contract grower is tied by agreement to the integrator to achieve a minimum live weight of 1.5 kilograms per bird.

Depending on the performance of the contract grower, the integrator pays the contract grower from PhP5.00 to PhP12.00 per bird harvested, on top of the contract grower's take of whatever birds are left after the integrator's harvest.

In the event the contract grower fails to meet the requirements, the integrator slaps the contract grower with a fine, called 'payback' by the contractors, the amount of which is equivalent to the difference between the expected total weight (90% initial population x 1.5 kgs) and the actual total weight of final population. The severity of the fine is proportionate to the gravity of the deviation from the standards.

The contract grower, on the other hand, hires workers on a per load or per batch basis. Each worker is paid a minimum of PhP3,000 for the duration of the contract (38 days). When the harvest is good, each worker can be given additional pay of as high as PhP4,000. The standard hiring ratio is one worker per 5,000 birds. In some cases, this goes up to one worker to 10,000 birds. In the breeder and layer farms, the average hiring ratio is one worker per 2,000 birds. There is also a difference in the duration of contract. Workers in the breeder and layer type farms have longer term employment because of longer cycles for such types of farm. Interviews with farm hands in one such farm revealed that workers have been hired continuously for years on end even as they remained contract workers receiving the same remuneration, with free living quarters and free meals.

The average load per contract grower is 30,000 Day-Old-Chicks (DOCs). The average number of loads per year per farm is five. Therefore, broiler farms have an average volume production of 150,000 per year. The combined production output of the twenty one broiler farms is 3,150,000 broilers per year. The combined number of workers from the twenty seven commercial farms averages 200.

During peak seasons, like the Christmas and New Year period, loads are doubled or even trebled. Just before the holiday season, most of the contract growers with sufficient facilities were given loads of 80,000 DOCs each. Hiring of workers has consequently doubled. Presently, loads are back to the average 30,000 to 40,000 DOCs for broiler farms.

The local feed grains retailers, while playing a very minimal role in the commercial poultry farm activities, had also enjoyed increased sales during the peak season as the contract growers also had to source from them extra feed grains.

Basic features of the poultry industry in Alaminos

Described below are some of the basic features of the poultry industry in Alaminos.

The dominant mode is contract growing, averaging an annual output of 3,150,000 broilers. Figures for breeders and layers are currently unavailable. An interview with a breeder farm owner, however, suggests that breeder farming is on the rise. His own farm is already slated for an increase in breeder stock to 100,000 first month of 2004 from a low of 35,000 in January 2003.

The dominant player is the integrator. He holds the sole decision making power in his relations with contract growers in the matter of loading volume and frequency; efficiency and sanitary standards; minimum weight per bird; feeds; minimum breeder eggs or layer eggs production per batch; and the brand or species of birds.

Backyard farms are located principally in ten rural barangays and the volume production varies widely from a low of 5 heads of native chicken to a high of 50 birds (separate interviews with backyard poultry raisers). Those raising fifty heads and above have to provide makeshift cages for the birds. There is no distinction between layers, broilers and breeders in backyard production of native chicken. Hence, even assuming that all the 6,500 households in Alaminos engaged in backyard raising of 50 birds in two annual batches, the total annual production output would only be $(6,500 \times 50 \times 2) = 650,000$ birds. And these numbers will be distributed randomly as table food, as breeders and as layers.

The share of local feed grain stores in the feed requirements of the commercial poultry farms is negligible and contingent only on the chance that contract growers run out of feed stocks supplied by the integrator. This was revealed by an interview with a feed grain store owner. Local feed grain stores combine feed grain sale with rice trading and sale of other perishable and non-perishable stuff. The share of feed grain sales in the gross revenue is from 20% to 30%. The bulk comes from the sari-sari store and rice trading. Hence, feed grain sale is treated as supplementary to the agricultural sari-sari store operation. This explains why their businesses remain viable despite the fact that they are not the main source for feed stock of the commercial poultry farms. These feed grain stores are the main source of feed grains for small, independent raisers. However, this economic symbiosis between small, independent raisers and the local feed grains stores comes within the ambit of the feed millers who are the ultimate source of feed grains, hence they are also vulnerable to the volatility of the feed grains market.

The municipal government is a passive player. It collects real estates taxes from contract growers whose lands are classified as agricultural lands. Taxes collected from the operation of

the commercial poultry farms range from PhP9,000 to PhP12,000 per farm.¹⁴ The maximum annual tax collection from the operation of the commercial farms is merely PhP324,000.00, not enough to make a dent in the development effort of the town.

The overall setup of the contract poultry farming in Alaminos allows for the integrator to squeeze the contract growers for production efficiency. In turn, the contract grower squeezes the workers in terms of very low wages, which are about PhP3,000 or US\$55 a month.

4. EFFECTS OF TRADE LIBERALIZATION ON POULTRY INDUSTRY

Increased imports resulting from WTO commitments

There was significant trade liberalization in the agriculture sector in the Philippines as a result of the country's obligations under the WTO. Implementation of the commitments began in 1995. The effects on the livestock sector in terms of increased imports were very significant.

Table 23 shows the local production and imports of dressed chicken. The import volume jumped from about 199 metric tons in 1996 to 966 metric tons in 1997 and to 2,417 metric tons in 1998 and then to 29,316 tons in 1999. Other livestock also experienced import increases. Table 24 shows the import of pork rising from 695 metric tons in 1994 to 2,183 metric tons in 1995 and to 6,072 metric tons in 1996.

Under the WTO commitments, the Philippines maintains two tariff rates for selected products. The country commits to apply the lower tariff rate (termed in-quota tariff) to a certain minimum volume of imports. This enables market access for other countries. The higher tariff rate (out-of-quota rate) applies to import volumes beyond the quota. It is the combination of the minimum access volume (MAV) and the lower tariff applying to this volume that facilitates imports.

For live poultry, the in-quota tariff rate was set at 40% for the whole of 1996 to 2000. The out-quota rate was 80% in 1996, 65% in 1997-98 and 50% in 1999-2000. For poultry meat, the in-quota rate was 50% in 1996 and then 45% for 1997-2000, while the out-quota rate was 100% (1996), 80% (1997-98) and dropping to 60% (2000). (Habito 2002: p33)

Table 25 shows the increase MAVs that the country committed at the WTO for several agricultural items for the years 1995 to 2005. For live poultry the MAV was 2.6 million heads in 1995, rising to 9.3 million in 2004 before declining in 2005. For fresh/frozen/chilled poultry the MAV was 7,300 metric tons (MT) in 1995, rising to a peak of 23,000 metric tons in 2004.

¹⁴ From the Office of the Treasurer, Municipality of Alaminos.

Table 23: Production and Imports of Dressed Chicken, Philippines. 1990-1999
(in metric tons)

YEAR	PRODUCTION	IMPORTS	TOTAL
1990	229,273	190	229,463
1991	286,874	34	286,908
1992	356,398	41	356,439
1993	364,481	113	364,594
1994	376,607	198	376,805
1995	399,551	191	399,742
1996	455,097	200	455,296
1997	496,686	966	497,653
1998	491,226	2,417	493,643
1999	496,429	29,316	525,745

Source: Bureau of Agricultural Statistics, Department of Agriculture; Habito 2002 Table2-2b.

Table 24: Production and Imports of Pork, Philippines, 1990-1998 (in metric tons)

YEAR	PRODUCTION	IMPORTS	TOTAL
1990	824,545.01	1,177.01	825,722.02
1991	845,189.00	741.47	845,930.47
1992	845,256.46	793.38	846,049.84
1993	880,944.91	418.47	881,363.38
1994	921,760.63	695.37	922,456.00
1995	969,862.46	2,183.42	972,045.88
1996	1,035,808.19	6,072.96	1,041,881.15
1997	1,085,544.33	10,369.22	1,095,913.55
1998	1,123,747.85	12,592.88	1,136,340.73

Source: Bureau of Agricultural Statistics, Department of Agriculture

Table 25: Minimum Access Volumes Committed to WTO, 1995-2005

PRODUCT	UNIT	YEAR										
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Live horse, asses, mules & hinnies	Head	29	57	57	57	57	57	57	57	57	57	29
Other live bovine animals	Head (000)	6.1	12.7	13.6	14.6	15.4	16.3	17.2	18.1	19	19.9	10.2
Live swine	Head (000)	1.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	1.3
Other live goats	Head (000)	24.7	51.2	54.9	58.5	62.2	65.8	69.5	73.1	76,803	80,461	41,075
Live poultry	Head (000)	2,569	5,634	6,342	6,765	7,188	7,611	8,034	8,456	8,879	9,302	5,328
Beef fresh/chilled	MT	2,000	4,087	4,261	4,436	4,611	4,785	4,959	5,134	5,308	5,483	2,786
Beef frozen	MT (000)	0	21.1	57.1	71.3	85.6	98.4	108.3	119.1	131	144.1	72
Pork fresh/chilled/frozen	MT (000)	16.3	33.7	36.1	38.5	41	43.4	45.8	48.2	50.6	53	27.1
Goat meat fresh/chilled/frozen	MT	335	695	745	795	845	895	945	995	1,045	1,095	560
Poultry fresh/chilled/frozen	MT (000)	7.3	15.2	16.2	16.7	17.7	18.8	19.8	20.9	21.9	23	10.4
Potatoes fresh/chilled	MT	465	965	1,035	1,102	1,171	1,240	1,309	1,378	1,447	1,516	772
Coffee, roasted/not, decaff/not; husks & skin...	MT	5	927	993	1,060	1,126	1,192	1,258	1,324	1,391	1,457	745
Maize, other than seed	MT (000)	65.1	135	144.6	154.3	164	173.6	183.2	192.8	202.5	212.1	108.5
Rice	MT (000)	29.9	61.5	65.1	97.1	112	119.5	134.4	164.3	194.1	224	142.2
Sugar	MT (000)	19.2	39.8	42.7	45.5	48.4	51.2	54.1	56.9	59.8	62.6	32
Soluble coffee	MT	0	20	21	23	25	26	28	30	32	35	37

Source: MAV Management Committee, Department of Agriculture; cited in Habito (2002).

MT: metric ton

Table 26: Imports, Exports and Food Balance Sheet of Chicken, Philippines, 1990-1999**(Metric ton)**

ITEM	YEAR									
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Domestic supply	267,086	291,707	356,439	346,584	363,047	399,775	455,297	497,648	493,643	525,745
Production	266,960	291,680	356,398	346,600	362,970	399,551	455,097	496,686	491,226	496,429
Imports	185	34	41	112	183	224	200	962	2,417	29,316
Exports	59	7		128	106					
Domestic utilization	267,086	291,707	356,439	346,584	363,047	399,775	455,297	497,648	493,643	525,745
Processed for food	53,417	58,341	71,288	69,317	72,609	79,955	91,059	99,530	98,729	105,149
Food	213,669	233,366	285,151	277,267	290,438	319,820	364,238	398,118	394,914	420,596

Source: National Statistical Coordination Board, June 2001; cited in Habito (2002)

However, the actual volume of imports is not necessarily the same as the MAV. Data in Gonzales (2003: p448) show that the rate of utilization of the MAV for live poultry was zero in 1995 to 2001. In the case of fresh/chilled/frozen poultry, the MAV was 16,160 tonnes in 1997 and the utilization rate (UR) was 9.9%, indicating actual imports under the MAV of 1,600 tonnes. In 1998 the MAV was 16,701 tonnes and the UR was 16.2%, thus actual imports were 2,705 tonnes. In 1999 the MAV was 17,746 tonnes, the UR went up to 90.9% and actual imports surged to 16,131 tonnes. In 2000 the MAV was 18,790 tonnes, the UR was 62.9% and actual imports were 11,819 tonnes. And in 2001, the MAV was 19,834 tonnes, the UR was 59.6% and actual imports were 11,821 tonnes. It can be seen from this the volume of imports of fresh/chilled/frozen poultry under the MAV scheme jumped by more than ten-fold from 1,600 tonnes in 1997 to 16,131 tonnes in 1999 before dropping a little to around 12,000 tonnes in 2000-2001.

Table 26 shows the situation regarding chicken domestic production, imports, exports and domestic supply between 1990 to 1999. The table shows the significant increase of imports after the entry of the Philippines to WTO. The import volume rose from 200 metric tones in 1996 to 29,316 tonnes in 1999.

The effects of the country's import liberalization were felt at the local community level, as the case study shows. In Alaminos, due to reduced demand as a result of the rise in imports of chicken, loading to contract growers were generally reduced by as much as 60%, with a

proportionate reduction in the number of contract workers. In some cases, loading was delayed and the workers had to wait for a longer period between the renewal of contracts. As salaries are very low, there is no mad scramble for the jobs at poultry farms. In fact, most farm hands are not from Alaminos. Those from Alaminos are often hired as administration staff, receiving PhP4,000 to PhP5,000 each, almost double the minimum salaries of farm hands. Administrative staff comprise about a tenth of the total work force.

Since the contract growers' main assets are their real estate properties, they have several options in case of a crisis in the industry, similar to what that happened when there was a glut in the market. They can (1) wait till the crisis dies down; (2) shift to other types of growing, for example, from broiler to breeder or layer; or (3) rent out their farm to new entrants. Of course, these options are all contingent on the final say of the integrators.

Market Access and the Matter of Subsidies

The Philippine government does not provide any export subsidies to the poultry industry. The players are left on their own to compete with subsidized produce in the international market. On the issue alone of export subsidies, the poultry industry cannot hope to survive the competition. Instead of accessing foreign markets, the domestic poultry industry has actually become vulnerable to competition from foreign imports in its own market. Thus, when the country imported massive amounts of chicken and chicken parts in 1998-1999 (see Tables 25 and 26) in compliance with its minimum access volume commitments to WTO, immediately the effect was a reduction in poultry production and the consequent loss of revenues for the contract growers and the uncertainty of employment for the farm workers in Alaminos.

The same is true in the case of inputs to poultry production. The main ingredients in poultry feeds are corn and soya beans. As large integrators gradually substituted corn with other feed grains, the linkage between the corn and the poultry sectors weakened [Guzman 1999]. With the entry of the Philippines to the WTO, the door was opened for the entry of cheap, subsidized feed grains. Table 27 shows the import of corn into the Philippines. The import volume rose dramatically between 1994 to 1995 and 1996, following the implementation of the WTO obligations. In the poultry sector, feeds make up the biggest part of the production costs, especially for the small-scale growers. Large-scale operators have a better chance of surviving the increasing production costs and the competition it faces from imported poultry.

The feed millers successfully petitioned the government into liberalizing corn importation, with the rationale that the high cost of production of domestic corn is stalling the development of the poultry industry. The removal of corn from the protected list of agricultural commodities further depressed the already depressed domestic corn production as a result of competition from heavily subsidized cheap corn imports, among others. The corn farmers in Alaminos who are planting corn for their own consumption can no longer hope to develop into commercial producers and much less into net exporters of corn feeds. The local government of Alaminos is not motivated to encourage corn production since the local farmers are unable to compete with the cheap and subsidized imported corn.

Table 27: Imports of Corn (metric ton) and by Source (% of total),Philippines, 1994-1999

ITEM	YEAR					
	1994	1995	1996	1997	1998	1999
Corn						
Imports						
Unmilled (metric ton)	893	208,024	402,345	300,731	113,118	145,150
USA (%)	(99)	(76)	(70)	(35)	(85)	(34)
Argentina (%)		(24)	(20)			(24)
China (%)				(65)	(14)	(41)
Seed	1			2,226		4,310
Thailand	(100)			(25)		
India				(67)		
USA						(46)
China						(24)
Sweet Corn	0					
Australia	(100)					
Dried, whole, cut, sliced, broken in powder, not further prepared	17					
Indonesia	(75)					
Japan	(25)					
Groats & Meal of Maize		286				
France		(56)				
USA		(44)				
Corn Flour			74	160		
USA			(99)	(64)		
Netherlands				(13)		
Spain				(12)		

Source: Habito 2002 (Table 2-3).

Meanwhile, the big feed millers, which are also the big integrators have a very wide latitude for deciding the sourcing of inputs. They could choose to or not to import feed ingredients as they see fit depending on where the positive effect will point to.

The local government unit does not have any support program for the poultry industry, neither for the commercial and backyard sectors, except that at the commencement of commercial contract growing in the early 1990s, the local government unit gave a one-year tax exemption.¹⁵

5. CONCLUSION

The liberalization of the import regime in the Philippines has led to increased imports of agricultural products into the country. There is another consequence: the deepening of the dynamic in which the poultry industry becomes more concentrated. There is increased domination by the big integrator concerns, which increasingly control not only the production of poultry, but also the supply of poultry feed, which constitutes the main cost of production. As a result, the contract growers and the small backyard producers are increasingly marginalized.

The case study shows up the high concentration in the poultry industry at the local level. The dominant integrator in Alaminos is Vitarich Corp. It is the sole source of breeders, layers, DOCs and feed grains for the contract growers as stipulated in individual contracts, and the main source even for the small, independent household producers.

This dominance is further strengthened by the complete dependence of the poultry industry in Alaminos, especially the contract growers, on poultry inputs such as feed grains. The provision in the WTO agreements for differential tariffs on a minimum access volume (MAV) of imports and on imports above the MAV favours the large scale feed mills which are at the same time big integrators, as well as the organized large scale commercial hog and poultry firms. Other independent poultry producers were effectively blocked from accessing preferential tariffs and had to contend with the higher domestic prices of corn and higher priced commercial mixed feeds. The effect is for the small and medium scale independent producer to eventually die out. In addition, the historic linkage between the corn and the livestock and poultry sectors can be expected to weaken or to break, as corn production is further dampened.

There is an utter lack of horizontal integration in that one sector's output (corn production) does not figure in the equation, even in a minor role, as input to poultry feed requirements. As a result, the growth in poultry production does not translate into a growth in corn production. Corn

¹⁵ Municipal Agricultural Office.

production in Alaminos remains where it is, production for personal consumption, even as commercial poultry production is enjoying unprecedented growth. The potential is there for the country to achieve horizontal integration, at the very least, in the poultry and corn industry but country's entry into the WTO diminished that potential.

The poultry industry in Alaminos operates like an economic enclave, with the big player (integrator) and junior partners (contract growers) extracting huge profits from the operation, leaving the place of operation without a trace of economic improvement. After more than ten years of profitable commercial poultry farming in Alaminos, the town remains a 4th class municipality.

While the poultry industry in Alaminos is enjoying steady growth, it will not be long before it too could suffer the fate of the corn industry. The corn industry is a dying one as it is battered continuously by the influx of cheap, subsidized corn imports. When more cheap, subsidized importation of chicken and chicken parts become the norm, the poultry industry in Alaminos could also be engulfed in a serious crisis.

The situation of small-scale poultry growers in Alaminos is representative of what happened to this sector in other parts of the country. The direct impacts of agricultural liberalization as seen in this case show that there is not much to hope for in terms of changing the tide for a better future for these small and medium scale producers. Cost reduction can happen through economies of scale and vertical integration which is a domain that only the richer and bigger enterprises can afford.

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