PROMOTING INTRA-REGIONAL TRADE IN AGRICULTURAL PRODUCTS IN WEST AFRICA: THE CASE OF HORTICULTURAL PRODUCTS IN GHANA

PAPER PRESENTED AT WORKSHOP ON INTRA-REGIONAL TRADE IN HORTICULTURAL AND LIVESTOCK PRODUCTS

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1. OVERVIEW OF THE HORTICULTURAL SECTOR*

1.1 National Production Parameters

Production of horticulturals is relatively low in Ghana, compared to the other major food crops (cereals, starchy staples). Total national production of the main vegetables traditionally-consumed vegetables (tomatoes, peppers, okro, garden-egg, shallots/onions) averaged 365,000 MT annually during the period 1993-1995 (Table 1.1)

Table 1.1

National Production of Key Traditional Vegetables: 1993-1995
('000 MT)

| | | Year | |
|---------------|-------|-------|-------|
| Crop | 1993 | 1994 | 1995 |
| Tomatoes | 193.7 | 182.2 | 212.2 |
| Pepper* | 87.2 | 88.6 | 100.5 |
| Okro | 29.4 | 31.4 | 35.0 |
| Garden egg | 28.6 | 25.1 | 29.0 |
| Shallot/Onion | 16.8 | 25.1 | 29.0 |
| Total | 355.7 | 343.5 | 397.6 |

*Includes mainly red pepper and types of sweet pepper.
Source: PPMED, Ministry of Food and Agriculture, Accra.

Corresponding to the low level of production, the total area cultivated under the major vegetables is low: 43,480 HA in 1995, compared to 689,000 HA for maize (Table 1.2). Yields of the traditional vegetables are also presented in Table 1.2.

Table 1.2

National Area Under Production and Yield of Key Traditional Vegetables:1995

| Crop | Area (HA) | Yield (MT/HA) | | |
|-----------------|-----------|---------------|--|--|
| Tomato | 15,120 | 14.0 | | |
| Pepper | 19,320 | 5.2 | | |
| Okro | 3,370 | 10.4 | | |
| Garden egg | 3,700 | 7.8 | | |
| Shallots/onions | 1,970 | 14.8 | | |
| Total | 43,480 | N/A | | |

Source: PPMED, Ministry of Food and Agriculture.

*This paper is a synthesis of Vordzorgbe (1996) and Vordzorgbe (1997).

1.2 Role of Horticulturals in the Economy

1.2.1 Total value of horticultural crop production

The MOFA estimates that locally produced vegetables and fruits contribute about 2 percent of agricultural GDP. Vordzorgbe (1997) estimated that onion constitutes about 1 percent and cowpeas about 0.5 percent of national agricultural GDP.

Data on estimated annual value of the harvest and sales of key horticultural crops, including yam, during the 1991/92 crop year, from the Report on the Third Round of the Ghana Living Standards Survey provide another indication of the economic values of horticultural prodution in Ghana (Table 1.3).

1.2.2 Employment effects

As noted earlier, production of horticulturals is labour-intensive, hence the employment impacts are potentially great, especially if agro-processing of horticultural products is included.

MOFA does not have available data on number of households cultivating key horticultural crops, as exists for the field crops. Nevertheless, one can get an indication of the labour-impact of horticulturals through estimates of the number of households harvesting the reference crops during the 1991/92 crop year in Table 1.3, although the data excluded individuals and households engaged in post-production activities, especially market trading and hawking.

1.2.3 Consumption and Utilization of Horticulturals

Horticulturals form a significant part of the diet: yams and plantain are major staples, vegetables are indispensable in stews and soups while fruits complement the diet.

Data from the Ghana Living Standards Survey (Round Three) were analyzed to provide indications of the extent of home-consumption of domestically-produced vegetables. The ratio of sales to harvested value of horticultural crop production in 1991/92 crop year are in Table 1.3. The result for onion confirms the fact that onion sold in markets is imported. Also, most tomatoes produced is sold in markets while leafy vegetables rarely enter the market.

Estimated national aggregate demand requirements for vegetables and fruits are shown in Table 1.4.

Table 1.3

Estimated Annual Values of Total Harvest, Sales of Horticultural Crops and Number of Households Harvesting the

Crop During the Year
(¢ billion)

(1991/92 Crop Year)

| Avocado pear 3.4 |
|--------------------|
|--------------------|

Source: Ghana Statistical Service (1995).

Table 1.4 National Demand for Vegetables and Fruits

| | Vegetables | Fruits | | | |
|------|------------------------|---------------------------|---------------------------|------------------------------|--|
| Year | Per Capita Demand (kg) | Total Demand ('000 MT) | Per Capita Demand (kg) | Total Demand ('000 MT) | |
| 1990 | 23.0 | 343 | 26.0 | 387 | |
| 1994 | 26.9 | 452 | 28.4 | 477 | |
| 1995 | 27.8 | 478 | 29.0 | 499 | |
| 1996 | 28.8 | 513 | 29.6 | 527 | |
| 2000 | 32.7 | 654 | 32.0 | 640 | |

Projected Estimates by MOFA.

Source: Statistics Division, PPMED, Ministry of Food and Agriculture.

2. INTRA-REGIONAL TRADE

2.1 Availability of Imported Produce: Sources, trading routes and seasonality

2.1.1 Sources

The major sources of key commodities imported from the region are shown in Table 2.1.

Table 2.1

Major Sources of Some Commodities Imported from the West Africa Region

| Commodity | Key Sources | | | | |
|-------------------------|---|--|--|--|--|
| Onions | Niger, Bukina Faso, Mali, Cote d'Ivoire | | | | |
| Potatoes | Niger, Bukina Faso, Cote d'Ivoire, Mali, Togo | | | | |
| Mango (including juice) | Bukina Faso, Cote D'Ivoire, Nigeria Bukina Faso | | | | |
| Cabbages | | | | | |
| Apples | Togo, Cote d,Ivoire | | | | |
| Green pepper | Bukina Faso | | | | |
| Mangoes | Togo, Mali, Cote d'Ivoire, Niger | | | | |
| French beans | Senegal, Cote D'Ivoire, Niger | | | | |

The apples imported from Togo are trans-shipments, most likely from Europe. Potatoes are also imported from the European Union, mainly Holland and Italy, which compete against West Africa imports. However, traders indicated during the field interviews that onions from Niger are bigger than those from Holland.

2.1.2 Onion supply routes

The major supply sources are in Niger and Bukina Faso. There are two main routes linking the major supply centres in Niger with Kumasi and Accra: one via Bukina Faso, and the other through Nigeria.

In terms of actual travel time, the shorter route is from Niger to Ghana through Burkina Faso. This route passes through Niamey, thence through Bitto in Bukina Faso and through Kulungugu in northern Ghana (Upper east region) to Kumasi and Accra. The key towns on this key onion route from Niger to Accra are given in Table 2.2.

Table 2.2

Key Towns on the Major Onion Trade Route from Niger Gelmi to Access

| Towns | Country |
|--|--------------|
| Konni Malanville Dossa Niamey | Niger |
| Kanchari Fada 'N' Gruma Bitto | Burkina Faso |
| Kulungugu | Ghana |

This route is characterized by numerous stops along the way at barriers mounted by Customs and Police officials in the transit countries. These stops, as indicated by traders at the Rex market, are detailed in Table 2.3.

The other trading route from Niger passes through Nigeria to Ghana. On this route, a truck of onion from Gelmi in Niger would pass through: Bimon-koni in Niger, Iuela in Nigeria, Parakuo in Benin, and the coastal trans-West African highway from Lome to Accra, and Kumasi.

The actual travel time for the journey from Niger on the main route through Niamey and Bitto is about 7 - 10 days. But, due to the numerous stops on the way and the long turnaround time in Accra (waiting to off-load, recoup transportation charge balances from importers, etc), the total return trip takes 3 weeks to 1 month. Thus, a truck is able to make the journey an average of once a month.

Onion originating from Burkina Faso (Bobodioulasso) destined for Kumasi and Accra pass through Ouagadougou in Bukina and Navrongo in Ghana. The actual travel time is 6-10 days but the total travel time is about 10-14 days. Based on the volume of business done on that route, a truck often makes one journey per month.

The route through Ouagadougou lengthens the travel time, as a route through the Hamile border post in Ghana (Upper West region) and thence through Wa would shorten the journey time. But that option is presently not utilized because most of the road from Wa to Techiman is only now being developed to a first-class status.

Table 2.3

Barriers for Onion Trucks Moving From Gelmi (Niger) Through Burkina Faso to Accra

| BARRIERS | OFFICIALS |
|--|-----------------|
| Murbaza | Douane, Police |
| Sarnawa | Douane, Police |
| Korini | Police |
| Yaya | Douane, Police |
| Dossa | Douane, Police |
| Birmi N'Konni | Police |
| Niamey (entry and exit) | Douane, |
| Toradi | Douane, Police |
| Markorandi | Douane, Police |
| Between Markorondi and | Police |
| Kanchari | |
| Kanchari | Douane, Police |
| Fada | Doaune, Police- |
| Farrah N' Gourma (entry | Municipal - |
| and exit: Burkina) | Council |
| Bitto | Douane, Police |
| Kulungugu | CEPS, Police |
| Bawku | CEPS, Police |
| Zibila | CEPS, Police |
| Bolgatanga | CEPS, Police |
| Walewale | CEPS, Police |
| Famale | CEPS, Police |
| Zuarungu | CEPS, Police |
| Yapei | CEPS, Police |
| Dupei | CEPS, Police |
| Kintampo | Police |
| lechiman e e e e e e e e e e e e e e e e e e e | CEPS, Police |
| Akumadan | Police |
| Kumasi (entry and exit) | CEPS, Police |
| Vsawam | CEPS, Police |
| Ofankor | Police |

2.1.3 | Seasonality of horticultural products imported or marketed in Ghana

The supply of imported horticultural commodities exhibits seasonality shown in Table 2.4. Note that, because horticulturals are cultivated as off-season crops in the key source countries in the region, the period of the major season of availability coincides with the dry season in the Sahelian zone. The early crop starts arriving in Ghana in September, the major season peaks in December - January, to coincide with the Christmas season, and starts tailing off in March. Furthermore, because these commodities are not grown in Ghana, and are available in the Ghanaian markets throughout the year, the seasonality of availability should not be expected to clearly defined: the seasons may not have clearly defined peaks in terms of fixed calendar months.

Table 2.4

Seasonality of Availability of Traded Horticulturals in Ghana

| Crop | Major Season | Minor Season |
|--------------|--------------------|--------------------|
| Onion | September - March | April - July |
| Potatoes | October - December | April - July |
| Mangoes | May - June | October - December |
| Green pepper | January - April | May - August |
| Cabbage | January - April | May - August |
| French beans | All-year | All-year |

2.2 Importance in national trade

2.2.1 Share of commodities in total national exchange

-Onion imports accounted for less than 1 percent of total merchandise import and 2 percent of agricultural inflows since 1970. The share of pulses, including cowpeas, is even smaller than that of onion. Together, with livestock, the three focus commodities formed 0.6 percent and 3.8 percent of total merchandise and agricultural imports, respectively (Table 2.5).

Table 2.5

Levels and Share of Major Commodities Imported From the Region in Total Agricultural Trade

| | Level of | Imports | (\$ mil) | | % Share | in Merch. Trade | % Share | in Agric. Trade |
|-------------------------|------------|------------|----------|--------|---------|--------------------|---------|--------------------|
| Period | Merch. Imp | Agrie. Imp | Pulses | Onion | Pulses | Onion | Pulses | Onion |
| 1970-72 ann. average | 379.7 | 94.2 | 0.3 | 1.30 | INS | 0.3 | 0.3 | 1.4 |
| 1978-82 ann. average | 1077,2 | 97.6 | 0.64* | 1.63-9 | INS | 0.1 | 0.7 | 1.7 |
| 1992' | 1457.0 | 238.4 | 1.1*.* | 2.4* | INS | 0.2 | 0.5 | 1.0 |
| 1993* | 1518.0 | 239.9 | 1.7** | 3.5 | 0.1 | 0.2 | 0.7 | 1.5 |

Sources Import data from FAO Trade Yearbooks, IMF International Financial Statistics, MOTI, GSS, MOFA

Modes

₹1971 - 1973

##1977 - 1979 imports from Niger and Burkina Faso and elsewhere

1977-1979 live imports from Burkina Faso and Niger

*1977 - 1979 pulse imports from Burkina Faso and Niger

**Includes estimated value of overland cowpea imports

*Agricultural import data include overland imports

"Bovine eattle only: excludes small ruminants

"Imports from the region

INS - Insignificant value

2.2.2 Share in total regional trade by Ghana

Ghana is a net importer of agricultural commodities from the region: the data exclude overland export values, but official data showed that during 1991-1993, imports from the region averaged \$652,759 annually, compared to \$41,337 for exports.

During the early post-ERP period, Ghana was importing about one-third of its merchandise imports from the region. However, trade between Ghana and the rest of the region has declined as a share of Ghana's total trade. Regarding imports, the share of 27.6 percent in 1985 dropped to 17.7 percent during 1991 - 1993 while exports share fell from 3.8 percent during 1985-1987 to 1.8 percent during 1991-1993 (IMF 1994).

Officially-recorded levels of imports of the focus commodities are in Table 2.6. Livestock and onion imports from the region accounted for less than 3 percent of Ghana's total merchandise trade in 1992 and 1993, while cowpea imports formed less than 1 percent (Table 2.7). Imports of onions formed about 75 percent of Ghana's total imports from Niger during 1992-1993.

Table 2.6

Imports of Focus Commodities from the Sahel: Official Data

| Commod ity | 1979 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 198 7 | 1988 | 198 9 | 199 0 | 199 1 | 1992 | 1993 | 1994 | 1995 | 1996 |
|----------------|------|------|------|------|------|------|------|----------|------|----------|----------|----------|------|------|------|------|-------|
| Onion (MT) | 27.8 | NA | NA | 435 0 | 379 9 | NA | 3203 | 6699 | 6216 | 1167 | 13347 |
| Cowpen (NT) | 4.2 | NA | NA | NA | NA | NΑ | NA | NA: | NA | 132 | 157 | NA | 1864 | 2583 | 1682 | 1308 | 6798 |

Sources: Annual Reports, Upper East Region, PPRSD, MOFA, various issues; Quarantine Station Records, Veterinary Services Department, Headoffice, MOFA.

Table 2.7

Values and Percent Share of Focus Commodities in Ghana's Total Merchandise

Trade in the Region

| Year | Onion (¢ million) | Onion (Percent) | Cowpea (c million) | Cowpea (Percent) | |
|------|----------------------|--------------------|--------------------|---------------------|--|
| 1992 | 1,085.2 | 0.7 | 373.8 | 0.2 | |
| 1993 | 2,369.9 | 2.3 | 772.8 | 0.8 | |

2.3. Trends in trade growth of focus commodities

2.3.1 Trends

For the onions and cowpeas, total trade is synonymous with regional trade, which in turn, approximates trade between the study countries. The long-term trend in imports is given in Table 2.8.

(a) Onion

Available data indicated that both the volume and value of onion imports from the region showed an overall long-term increasing trend. Initially, however, imports fell: imports from Niger and Burkina Faso dropped from 4,318 MT in 1973 to 100 MT in 1983, an average annual rate of fall of 9.8 percent. The sharp recorded fall in 1977 import data was probably partly due to data deficiencies.

The volume of imports began a positive trend from 1988 which accelerated in 1989. Between 1989-1996, imports showed an average rate of growth of 24 percent annually. In particular, the increase in imports accelerated from 1995 when imports rose by 88 percent over the 1994 level, probably in response to the CFA devaluation of 1994.

In terms of value, the average annual import of onions increased by 23 percent during 1970-1972 to 1978-1982. Average annual imports during the 1978-1993 period increased by 119 percent by 1993.

Table 2.8 Ghana: Total Imports of Focus Commodities

| Year | Onion (MT)* | Cowpea/Pulses (MT) | | |
|------|-------------|--------------------|--|--|
| 1970 | 113 | 147 | | |
| 1971 | 3375 | 1679 | | |
| 1972 | 3262 | 3250 | | |
| 1973 | 4318 | 4030 | | |
| 1974 | 3937 | 495 | | |
| 1975 | 2965 | 492 | | |
| 1976 | 1812 | 111 | | |
| 1977 | 94 | 66 | | |
| 1978 | 68 | 120 | | |
| 1979 | 125 | 104 | | |
| 1980 | 100 | 500 | | |
| 1981 | 100 | 300 | | |
| 1982 | ND | 80 50 | | |
| 1983 | 100 | | | |
| 1984 | 500 | 50 | | |
| 1985 | 45 | 300 | | |
| 1986 | ND | 80 | | |
| 1987 | 100 | 50 | | |
| 1988 | 500 | 50 | | |
| 1989 | 4950 | 1928 | | |
| 1990 | 4599 | 2282 | | |
| 1991 | 1100 | 250 | | |
| 1992 | 4303 | 2234 | | |
| 1993 | 7249 | 2583 | | |
| 1994 | 6216 | 1682 | | |
| 1995 | 11676 | 1308 | | |
| 1996 | 13341 | 6798 | | |

1989-1993 data combined PPRSD and FAO data, 1993-1995 data were from PPRSD only.

(b) Cowpea/Pulses

It was more difficult estimating the trend in growth of trade in cowpeas since data on 'pulses' was used as a proxy for cowpeas during some years.

Imports of pulses were more variable that the two other commodities. However, historical volume imports showed a decline of 9.8 percent per annum between 1972/1973, when imports averaged 3,640 MT annually, and 1982/1983 when imports averaged 65 MT.

Imports showed an upward trend from 1989, rising from 1,928 MT in 1989 to 6,798 MT in 1996, representing an annual rate of growth of 36 percent. Import volumes rose in 1996, reflecting delayed effects of the CFA devaluation.

The value of imports of cowpeas/pulses doubled from \$0.3 million in 1970-1972 to \$0.64 million in 1978-1982 (FAO 1995). Import values further doubled by 1992 and showed yet a 55 percent increase in 1993.

Overall, for all the commodities, imports fell from the levels in the 1970s, but started increasing from 1989. The post-reform reduction in imports of onion and pulses reflected the general state of merchandize imports. Ghana's total merchandise imports from the region fell drastically immediately after the inception of the ERP: imports dropped from \$1,139.7 million/year during 1980-1982, to \$621.3 million/year during 1983-1985, representing a drop of 45 percent.

2.3.2 Changes in pre and post-ASAP trade flows

In analyzing changes in trade flows, one would consider four aspects: (a) levels (volumes or money values), (b) direction of flows, (c) commodity structure or composition, and (d) type of flow.

Officially-recorded data on onion imports showed that the fall in the level of imports started well before the reforms began in 1983. As, noted, part of the fall may have been due to data problems, but the negative trend persisted until late the 1980s, after the agriculture-sector reforms began. Thus, the data did not show any immediate post-reform changes until later. The major post-reform increase occurred in 1995.

As in the case of onion, cowpea/pulses imports from the Sahelian trading partners started declining before the reforms in 1983 and it continued until the late 1980s.

There has been no change in the direction of trade flows between Ghana and the study partners in the three commodities since the inception of the ERP: Ghana still imports these commodities with none or negligible quantities going the other direction.

Trade flows are either official or unofficial. It was difficult to estimate unofficial inflows of onion and cowpeas,

if any, since restrictions on general agriculture trade were lifted under the ERP. Nevertheless, these commodities traditionally come in through official channels.

2.4 Exports of Horticultural Products

Export flows to the West Africa region are shown in Table 2.9. On the whole, exports from Ghana to the region are relatively small, amounting to 328.7 MT, valued at \$50,650 in 1995. The key destinations are: Togo and Cote d'Ivoire. Excluding yam, the major crops exported are: aubergines, tomatoes, pepper, lemon, and fresh oranges.

Table 2.9

Exports of Horticultural Crops to ECOWAS Countries (1993 - 1995)

| Year | Volume (MT) | Value (\$'000) |
|------|----------------|-------------------|
| 1993 | 111.3 | 36.3 |
| 1994 | 37.4 | 18.7 |
| 1995 | 328.7 | 51.0 |

Source: Computed from data from Ghana Export Promotion Council.

Some details of annual exports to ECOWAS during 1993-1995 are presented in Annex A.

Some cross-border export takes place in tomatoes in northern Ghana: Small amounts move from Bolgatanga, Navrongo, Bawku and other major growing areas through various routes into Burkina Faso and Togo. However, data are not available on these movements, and are only now being generated by the Ministry of Trade and Industries, under the USAID-funded Trade and Investment Project (TIP).

3. FACTORS AFFECTING TRADE IN HORTICULTURAL PRODUCTS

3.1 General factors affecting changes in flows

Several factors can potentially affect changes in trade flows. Within the framework of the Ghanaian experience, the variables that have variously affected trade flows within the region in the focus commodities to different degrees and a matrix showing an assessment of the nature of change in imported levels of the focus commodities in response to relevant change variables in given in Table 3.1. Natural resource management issues and stake-holder participation in decision-making were considered to have made relatively little impact on agricultural environment and intra-regional trade.

Table 3.11 Matrix of Change Variables and Effects on Import Levels

| Change Variables/Reforms | Onion | Cowpea |
|---|------------------|------------------|
| Foreign exchange regime reforms | | |
| - Exchange rate devaluation - Payments reform | + | ? |
| Trade reforms | | |
| - Import restrictions - Transit requirements - Tariff reforms | + - N | + - N |
| Price reforms - Liberalized output pricing - Increasing inflation | + - | + - |
| Productivity factors | | |
| - Higher enterprise revenue - Higher transaction costs - Falling terms of trade - Reduced input supply | + - - + | + - - N |
| Consumption factors | | |
| - Trend in demand | + | + |
| State role in marketing | | |
| - Stop role in marketing | N | N |
| - Higher service cost-recovery | N | N |

Key:

signifies positive effect or increased imports signifies negative effect or decreased imports

signifies neutral or no effect

contributed to the improvement of the foreign exchange situation The renewed profitability of exports and import-substitutes payments system restored incentives for traded foods in general. The liberalization of the exchange rate and higher imports. economy exerted positive impact on overall trade, including systemic beneficial effects of lowering distortions in the level, directly led to lower imports, but at another level, its the levels of other prices in the economy. Devaluation, at one affected trade, since the price of foreign exchange determines policy of flexible exchange rates is the key variable that has In terms of the impact mechanisms of change variables, the

3.2. Onion Imports

which catalyzed imports.

trade reforms, (b) the productivity factor, considerations, (d) state role in input $\sup y$. demand (a) reform flows of onion imports were: (a) foreign exchange and The key variables that affected changes in pre- and post

(a) Foreign exchange and trade reforms

1988, acted as impetus to increasing imports of onions and other licenses in 1989, following the institution of forex bureaus in the abolition of the requirement for importers to obtain import livestock, also contributing to maintaining flows. Furthermore, abolishment of import duties on agricultural imports, gadebre restriction on imports of agricultural commodities and the trading operations, enhancing exports to Ghana. Removal of the toreign exchange through the forex bureaus facilitated their Traders interviewed indicated that liberalized access to post-ERP period was partly due to the rapid devaluation of the Clearly, the fall in onion imports during the immediate

commodities.

(b) Productivity

trade with Ghana (Vordzorgbe 1996). Niger add about 10 days per month to travel times in the onion higher transaction costs, mainly due to bureaucratic import regulation procedures, including the stops at the numerous checking points: it was estimated that stops along the way from Productivity factors that affected onion flows include

imported onions are in high demand. Thus, the relationship is more of complementarity than of competition between local place: onions from Bawku are scarce around Christmas when production from both sites complement each other in the market in Niger and the existence of a large market in Chana where imports flow to Ghana because of the larger volume of production (Gelmin) than in Ghana (Bawku) while yields were similar. Ontons onion unit production costs were 40 percent higher in Niger enjoy any comparative advantage over Chana in onion production: Costs (DRC), but Vordzorgbe (1996) showed that Niger did not was comparative advantage. This study did not compute coefficients of comparative advantage, such as Domestic Resource Another productivity factor that determined inflows to Chana

(c) Demand factors

Onions are a staple vegetable in the Ghanaian diet but there are no estimates of demand for onions. Per capita requirement of the traditional vegetables consumed in Ghana (onion, pepper, tomatoes, garden egg) was estimated at about 28 kg/head in 1995 (Vordzorgbe 1996). Some indirect evidence suggests that the demand for onions has risen since the reforms, contributing to maintaining import levels: (a) the restaurant and cooked-foods subsector has expanded, implying increased utilization of onions, (b) local production of shallots, which competed with onion, has fallen in recent years.

(d) Public role

Another variable which had an indirect effect on post-reform flows was the privatization of agricultural input supply, which has negatively affected input availability, pricing and use in smallholder agriculture (Jebuni and Seini 1992). This has likely affected domestic onion production.

3.3 Cowpea/Pulses Imports

Factors affecting import inflows of cowpeas were more difficult to discern than for the other two commodities, partly because the data were more variable, as mentioned earlier. Nevertheless, being a crop commodity which is often imported and transported together with onions, it has been subject to similar policy and institutional pressures. However, since cowpeas are more widely cultivated in Ghana than onion, although production levels are low, changes in domestic production have contributed to influencing levels of import inflows.

4. MARKETING OF IMPORTED HORTICULTURAL PRODUCTS

4.1 Structure and Conduct of Marketing Imported Horticultural Products

4.1.1 General structure

The marketing of imported horticultural commodities in Ghana is a private sector activity undertaken by atomistic traders operating competitively. The overall structure follows that for marketing other agricultural products, but the system for marketing horticulturals has its own peculiar institutional characteristics.

As an example, the importation, and most wholesaling, of onion is overwhelmingly dominated by male traders, while retailing is handled mainly by women. This is because onion retailing takes place within the mainstream food marketing system while imports are wholesaled in specialized onion markets.

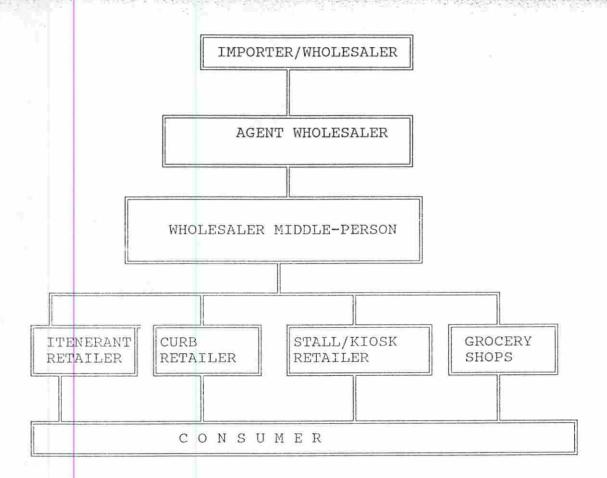
As another example, there are no specialized grocery shops for retailing horticultural products, and several grocery shops do not sell horticultural crops. Marketing of horticultural crops is by crop-specific traders (e.g. those selling only onions, tomatoes, oranges), specialized fruits and vegetables kiosks, and, table-top sellers. In recent times, there has also emerged the class of itinerant hawkers selling about three to five varieties of vegetables and fruits (often including: carrots, green onions, cabbage, cauliflower, and green pepper) on the head-pans.

4.1.2 Onion Market Structure and Conduct

The marketing of imported onions in Ghana follows a chain from the importer to the retail trader. The structure for marketing onions imported from the West Africa region in Accra is shown in Figure 4.1.

The importer mainly buys at source from farmers in the producing countries (Niger, Bukina Faso, etc). However, some buy from other traders and a few buy through agents. A typical importer does not buy from a single source but often visits several farms or villages to assemble his load. The importer is responsible for the transportation and safe arrival of the goods at the destination before handing them over to an agent. Some importers also wholesale directly.

The agent takes delivery of the goods, on arrival at Accra, from the importer, informs his customers (wholesalers) at the various marketing centres, and, distributes and sells the product to the wholesalers in bags. The agent collects the money and accounts to the importer. The agent is responsible for the safe storage of the goods during the distribution period and also provides accommodation for the importer, as needed. In addition, agents often provide the importer with soft loans.



The wholesaler buys from the agents to sell at the various marketing centres. The wholesaler provides information on market demand for the produce to the agent to guide subsequent supplies. Some retailers also import directly, mainly from Niger, but the majority obtain it through other traders, wholesalers and other retailers. In general, the retailer buys a bag, or a smaller quantity, from the wholesaler and sells in lots of single bulbs directly to consumers at the market place. Some use scales in selling their wares.

Where retailers procure their stock from importers, these wholesalers, usually Gao traders, periodically visit the retailers, often on their rounds to collect their payments for credit sales to retailers, to provide fresh stock to retailer-customers.

Within the marketing chain, some of these retailers are curbside or itinerant hawkers who buy smaller lots from retailers or wholesalers; very few buy their wares directly from importers. Petty retailers buy their tomatoes from Agbogbloshie, 31st December, get their onions exclusively from the Rex market and obtain their potatoes from the Tudu market. Other retail sources include those who sell from table-tops and vegetable kiosks, and a few fruit and vegetable outlets in selected grocery shops.

The structure for marketing imported onions in Kumasi is similar to that in Accra. For example, in Kumasi, the agent buys the onions from the importer, stores it and sells to mainly-women wholesalers, institutions and grocery shops.

4.1.3 Storage and grading

The markets in which these imported horticultural products are sold lack basic storage facilities. For example, the main onion market at Rex has only an open-sided roofed-shade. Only 2 out of 18 onion wholesaler-importers interviewed in Accra owned some form of storage facilities in Accra. Onions imported in sacks are left in the open, for air drying during the day, but are covered at night.

Wholesalers grade the onions into a few groups of different bulb sizes, but sizes are not standardized. However, the weights of the bags are fairly standard at 25 KG or 50 KG. Retailers re-bag in smaller polythene bags while a few sell by weight using scales. In effect, there are standard marketing practices, but no standard measures.

Importer-wholesalers interviewed stated that the onion produced in Ghana (at Bawku) is much smaller than that imported from the region. Some traders also considered the locally-grown onions as less tasty than the imported varieties. However, some petty retail traders indicated that local onions last longer. Other traders did not report any major difference between local and imported onion while others thought that those from Niger store longer than Bawku onions.

Compared to onions from Holland, the traders indicated that those from Niger posses a reddish skin and are bigger and cheaper. But the onions from Holland, with yellowish skin, are reported to be of a better quality, which are preferred by restaurants, and have a longer shelf-life.

4.1.4 Size of Onion Trading Businesses

(a) Levels of imports or gross sales

Ba ed on interviews of onion importer-wholesalers in Accra, they import between 200-600 bags (50 KG) every 3-4 weeks. The average importer brings in 300 bags and wholesale; the lot in about 10-14 days during the peak season or in about 1 month during the lean season. The highest indicated level of imports by a single trader was 900 bags per month over a limited period. The levels of imports are lower in Kumasi where importer reported average monthly imports of about 50 bags (50 KG). The highest reported import was 160 bags by a trader in 1994. In terms of size of business, a typical retailer sells 1 bag of onion or potato (25 KG) in about 3-4 days. However, those located in residential areas populated by foreigners usually sell more. Reflecting their small size, the volumes of business of petty/itinerant retailers is low: an average seller sells a 50 KG bag each of onions and potatoes in 4 days to 1 week.

(b) Number of workers

The on on trade is labour-intensive. However, total employment generated is limited by the overall relatively small size of the business. The average number of worker employed in the importing and wholesaling of onion is 3 or 4 per enterprise. The highest recorded number of workers during the interviews was 10 by the enterprise that imports an average of 900 bags twice a month.

4.1.5 How the Markets Work

(a) Price determination

The marketing of imported onions is conducted under very competitive conditions, including: unrestricted entry and exit into the business, the existence of many operators, and the observation that pricing decisions generally follow supply and demand considerations. However, the initial transfer price of imported onion between the agent and the importer is determined by agent-client considerations, since the agent often finances the importation.

One feature of the pricing system for imported onions is that the importers and wholesaler are free to set their base prices; ruling prices are not fixed by the heads of the traders associations. But all traders tend to charge the same prices within a given market on any trading day. Due to the relatively longer shelf life of onions, selling prices do not differ during the day, as occurs for other horticultural crops for which distress selling in the evenings lead to reduced prices later in the trading day.

Due to size and quality differences between local and imported onions, prices also differ for the two types of onions. A few (about 30 percent) of the traders interviewed indicated from their prices that the price of the local types was lower than that of the imported type. However, the majority of the traders said the reverse: the local produce costs more than the imported due to the smaller output. This latter viewpoint may also hold because the traders further indicated that the local produce often attracts a higher price during the lean season than the imported produce. However, during the interview, local onion was being sold at prices which were between 20-25 percent lower than the price of imported onion. This may be because the interviews took place during the major season of availability.

(b) Payment arrangements

In general, buying and selling transactions are conducted on cash and carry basis, with little up-front credit. However, since the importers and producers often establish long-term trading relations, some producers occasionally grant credit to some importers.

Some importers export salt to sell to pay for horticultural imports. This practice originated as a form of barter of salt for onions and potatoes in Niger and Bukina Faso. The 1994 devaluation of the CFA and the daily fluctuation in the value of the Ghana Cedi have made it difficult for traders to determine exchange-values for the horticultural commodities. Consequently, the two-way exchange of salt for horticulturals continues.

Credit arrangements predominate between the importers and the agent wholesalers as a result of long associations they have established: some sellers often have had between 10-15 years business contact with the importers. Some wholesalers also sell to customer-retailers on credit basis.

4.2 Onion Marketing Costs and Margins

4.2.1 Marketing costs and margins

Estimates of marketing costs at the importer-wholesaler levels in Accra and Kumasi are presented in Table 4.1. An interesting observation from the cost analysis was that the wholesale cost build-up for onions in Accra and Kumasi are about equal. Similarly, wholesale prices did not differ much between the two cities. Consequently, there was little opportunity for arbitrage. However, there was evidence of some trans-shipments of onions from Kumasi to Accra, averaging about 6 trucks carrying about 200 bags (50 kg) per month.

As noted earlier, importers face additional costs and charges associated with the stops at the barriers along the way. Traders interviewed reported those expenses to range between ¢300,000 - ¢500,000 per truck per trip. Outlays of this order of magnitude need to be factored in considerations of the profitability of the business to traders.

Table 4.1 Wholesale Price Buildup in Marketing Onions

| COST ITEM (Per Unit) | Onions (Rex Market in Accra) (50 KG bag) | Onions (Kumasi) (50 KG bag) |
|-------------------------|--|-----------------------------------|
| mport Purchase | CFA 5,000* | CFA 5,000 |
| Cartage | CFA 100 | 3 |
| Storage | 2 | 3 |
| Loading | CFA 100 | CFA 500 |
| Custoins | CFA 1,900 | CFA 1,900 |
| Haulage | CFA 4,000 | CFA 3,600 |
| Fees in Transif | c1,000 | c1,000 |
| Off-loating | c200 | • |
| Carta_e | - | c600 |
| Storag | - | ¢1,000 |
| Other fee. | c400 | c200 |
| TOTAL | ¢37,120 | c38,000 |

Estimates of marketing margins for various operators in the import-marketing chain for onions are given in Table 4.2.

Based on average load per truck of 300 bags and reported average payment of c300,000 at all the stops on the way. Reported payments by trades in Kumasi were much higher than those reported in Accra. It is impossible to verify these alleged payments.

Charged by the Accra Metropolitan Authority (A.M.A) and the Kumasi Metropolitan Assembly (K.M.A).

Table 4.2

Gross Marketing Margins for Imported Onions: Accra and Kumasi

| | Heliand I. I. | Accra | | Kumasi |
|------------------------|-------------------|--|-------------------|---|
| Margin | Amount (Cedis) | Gross margin as ratio of retail price (%) | Amount (Cedis) | Gross margin as ratio of retail price (%) |
| Importer/ Wholesale | 39,400 | 67 | 40,000 | 62 |
| Retailer | 15,000 | 25 | 10,000 | 16 |

Gross margins for importer-wholesalers were higher than those for retailers, reflecting higher marketing expenses they incur. But the higher margin could also indicate higher profits. Based on the build-up of the wholesale prices, the importer in Accra received a net margin of about ¢23,000, equivalent to 38 percent of the wholesale price, and to 32 percent of the average retail price of ¢70,000/bag. Since additional marketing expenses for retailers were often limited to the payment of daily AMA tolls of ¢200 per day, the ratio was likely higher than that for retail margin, suggesting higher per unit profits for importer-wholesalers.

The net margin for importer-wholesalers in Kumasi was ¢17,000 per bag. This was equivalent to 31 percent of the wholesale price, and to 26 percent of the retail price at the time of the interview. The net return to wholesalers as a ratio of both the wholesale price and the retail price was lower than that for Accra.

4.3 The Marketing System for Other Products

4.3.1 Potatoes

The marketing system for potatoes imported through intra-regional trade is similar to that for onions. However, much fewer traders are involved in potato marketing than for onions. Furthermore, few traders sell potato alone: it is often sold together with other vegetables. The typical importer-wholesaler imports about 500-700 bags of 25 KG weight monthly. The largest reported import was 1,200 bags. Some importers of potato from Niger indicated that there are no import licensing as such, but the waybill must be inspected by customs and endorsed by health officials.

The traders opined that potatoes from Niger are more regular on the market than those from Holland. Niger potatoes are bigger, contain more water, and, are cheaper than those from Holland which taste better, last longer and are preferred by restaurants. Holland potatoes come into Ghana as transhipment from the Lome free port in Togo.

The cost of wholesaling a bag of potatoes in Accra is given in Table 4.3. During the period of the interview, the wholesale price range was \$35,000 - \$45,000 per 25 KG bag and the retail price equivalent was about \$50,000 per bag. Gross marketing margins in marketing potatoes imported from Niger in Accra are presented in Table 4.4. The net marketing margin for importer-wholesalers of potatoes was about \$15,700 per bag, representing 45 percent of the wholesale price and 31 percent of the retail price at the time of the interview.

Table 4.3
Wholesale Marketing Costs: Potatoes Marketed in Accra

| COST ITEM | Cost per bag of 25 KG |
|------------------|-----------------------|
| Purchase | CFA 3,000° |
| Cartage | CFA 100 |
| Storage |) — · |
| Loading | CFA 150 |
| Customs | 2 |
| Haulage | CFA 3,000 |
| Off-loading | c150 |
| Cartage | -c100 |
| Storage | |
| Other fees (AMA) | c300 |
| TOTAL | c19,300 |

The exchange rate was: CFA 1 = c3.0

"This excludes any estimation of the payments by importers at the stops along the way.

Table 4.4

Gross Marketing Margins for Potatoes: Accra

| | | Accra |
|------------------------|-------------------|---|
| Margin | Amount (Cedis) | Gross margin as ratio of retail price (%) |
| Importer/ Wholesale | ¢26,000 | 50 |
| Retailer | c15,000 | 30 |

4.3.2 Mangoes

The major supply source in La Cote d'Ivoire is Yamoussoukrou through Jewi Wharf to Accra. The journey takes about four to five days. From Togo, the major source is Kpalime, from whence the mangoes pass through Shea or Nyive border posts and Ho to Accra. Imported mangoes are most available from August - October. The marketing chain follows a straightforward channel from the importer to the wholesaler, then to the retailer and finally the consumer. The size of the business of mango importation is much smaller than that for onions and potatoes and it appeared that less than 10 individuals are engaged in importing mangoes for marketing in Accra. The imported mangoes are different from the local types: the imports are hybrids, fibre free, very juicy, have flat seeds and are suitable for canning.

The costs of importing and marketing mangoes are given in Table 4.5 and marketing margins in mango trade in Accra in Table 4.6.

Table 4.5

Marketing Costs and Prices in Mango Trade: Accra

| COST ITEM (Per 30 KG crate) | Mangoes Imported From Cote d'Ivoire | Mangoes Imported From Mali | Mangoes imported from Togo |
|--------------------------------|--|----------------------------------|----------------------------------|
| Purchase | CFA 4,500 | CFA 5,000 | CFA 6,000 |
| Haulage | CFA 2,500 | CFA 4,000 | CFA 2,500 |
| Off-loading | c 200 | c 200 | c 200 |
| Other fees | c 200 | c 200 | c 200 |
| TOTAL | ¢24,400 | ¢27,400 | ¢25,900 |
| Wholesale price | ¢33,000 | c35,000 | c35,000 |
| Retail Price | c40,000 | ¢45,000 | c43,000 |

The exchange rate was: CFA 1 = c3.00

These exclude payments at the stops on the trip

Table 4.6

Gross Margins for Mangoes Imported from Three Sources: Accra

| | From | Cote d'Ivoire | From | Mali | From | Togo |
|------------------------|------------|--|------------|---|------------|--|
| Level | Amount (¢) | Gross margin as ratio of retail price (%) | Amount (C) | Gross margin as ratio of retail price (%) | Amount (¢) | Gross margin as ratio of retail price (%) |
| Importer/ Wholesale | c9,000 | 23 | 20,000 | 44 | 14,000 | 31 |
| Retail | c7,000 | 18 | 10,000 | 22 | 10,000 | 22 |

The results showed that at the time of the interviews, the gross returns to wholesaling were higher for mangoes from Mali and Togo than those from Cote d'Ivoire. From the analysis, it may appear that wholesale margins for mangoes from Cote d'Ivoire are too low to provide adequate returns to wholesaling, but wholesalers also retail their wares and wholesalers sell other horticultural crops, in addition to mangoes, to diversify their income.

4.3.3 Green pepper marketing in Kumasi

The sellers in the European Market at Adum, often import these commodities as part of a group of products, usually in Bukina Faso from traders. Average imports are about 4 bags (100 KG each) of green pepper. Quality differences between the local and imported produce result in price differentials: the traders indicated that green pepper from Bukina are larger than the local produce, but have a shorter shelf life. The import cost of green pepper are presented in Table 4.7.

Table 4.7

Import Cost of Green Pepper in Kumasi
(100 KG bag)

| | (100 110 0115) |
|-------------------------|---------------------------|
| COST ITEM (Per Unit) | COMMODITY Green Pepper |
| Purchase | CFA 15,000 |
| Cartage | CFA 200 |
| Customs | CFA 5,000 |
| Haulage | CFA 1,000 |
| Fees in Transit | CFA 3,000 |
| Off-loading | ¢200 |
| Other fees | ¢200 |
| TOTAL | ¢75,900 |
| | |

4.4 Traders Associations

4.4.1 Associations of Onion Traders in Accra

The effective functioning of markets depends on the institutional base. Regarding the intra-regional trade in horticuturals, it is dominated by associations of traders, often grouped on ethnic lines in the onion trade. These associations are groups of importer-wholesalers trading at the various markets who come together as a way of organizing activities at the various market places. The members conduct their business individually: the association does not pool import orders nor does it order goods on behalf of the group. From the interviews, the associations control and regulate the importation of onions in particular.

Some descriptive characteristics of the key onion-trader associations operating in Accra and Kumasi are presented in Table 4.8. Both the Bisa and the Zambrama Associations have their roots in Niger, the Gao group in Mali, and the Hausa association in Bukina Faso. The study could not identify any association of Ghanaian traders.

The individual traders have been in the business for some time, but the associations in Accra operating at the Rex market are fairly new organizations, formed since 1994. The traders have seemingly been late in forming associations because they were re-located to the Rex market after the old market burned in November 1993. The survey indicated that associations in Kumasi are older than those in Accra.

Table 4.8

Profiles of Onion Importers Associations in Accra

| Association | Year Formed | Membership (As at March 1996) | Registered Officially |
|------------------------|----------------|----------------------------------|--------------------------|
| Bisa Onion Traders | 1995 | 40 (4 females) | No |
| Gao Onion Traders | 1994 | 45 (10 females) | Yes |
| Zambrama Onion Traders | 1994 | 22 | No |
| Hausa Oni m Traders | 1994 | 60 (10 females) | Yes |

With the Registrar-General's Department in Accra.

The associations of traders handling imported onions have similar objectives: mutual aid and enhancing trade. From the interview, their major aims were to:

- (a) enhance onion production and marketing in the country;
- (b) give financial assistance to members for business purposes;
- (c) serve as a welfare society;
- e pose the transit problems associated with the importation and marketing:
 payment of unauthorised levies at barriers and check points on the journey
 from the origin to the destinations;

- (e) promote mutual co-operation and understanding among members;
- (f) help stabilize onion prices for consumers.

4.4.2 Kumasi Onion Sellers Association

The major activities of this group, which is located at Alabar in the Kumasi Central Market, are the importation and wholesaling of onions and beans. This association mentioned among its key achievements, their contribution to stabilizing the market price of the commodity, and some improvement in personal relations between individual members.

4.4.3 Associations of Traders of Potatoes and Other Crops

Table 4.9 presents profiles of some potato associations covered in Accra during the interviews.

Table 4.9

Profiles of Some Associations of Potato Traders in Accra

| Association | Year Formed | Membership | Registered formally |
|--------------------|-------------|----------------|------------------------|
| Mangus and Company | 1994 | 12 (4 females) | Yes |
| Morocco House | 1993 | 8 | No |
| Kokomba Market | 1994 | 10 | No |

With the Registrar-General's Department in Accra.

(a) Magnus Import and Export Co Ltd, Accra

This is a private company with affiliated traders dealing in potatoes and other horticultural products. Their objectives were to: (a) improve the sales of the product, (b) ensure the availability of the product on the market always, (c) assist each other financially. The group was engaged in the following major activities: distribution and marketing of potatoes, building a market place, undertaking farming activities, including building a dam for irrigation in Niger. The group also finances farmers in Niger. Among their services to members, they provide loans at 25 percent annual interest basis and offer credit sales to members who have retail shops. Among its achievements, the group has acquired a landing bay with storage facilities and has been promised a site for a market by the AMA.

(b) Morocco House Importers, Accra

The main activity of this group of individual traders is to import potatoes and to distribute them to retailers. Their objectives are similar to those of Magnus and Company. The major

service they provide to their members is information and advice on distribution and sales of the products. The association has been able to acquire a warehouse for storage and is engaged in education members about international marketing requirements. In terms of linkages with the scientific community, the Ghana Standards Board provides it information about required international standards. They also interacted with the Food Research Institute to obtain information on the nutritional value of potato for their customers.

4.4.4 Promoting Intra-regional Trade through Linkages between Traders Associations

A key mechanism that could be utilized to promote intra-regional trade is linkages between traders associations in trading countries. This is underscored by the experiences of Magnus Import and Export Company, and, the Kumasi Onion Sellers Association.

Magnus Import and Export:

Magnus started buying potatoes from Togolese traders in 1992, but stopped since when lower-priced supplies from Niger became increasingly available. However, in when production in Niger was negatively affected by the ethnic crisis, the Togo association provided about 750 mini bags (25 kg) every month for about 6 months to Magnus and Company. In response, at the peak of the Togo political crises in late 1994 and early 1995, Magnus and Company supplied them about 400 (25 kg) bags every two or three weeks for about 7-8 months. Magnus and Company also communicates with importers and traders association who import from Holland in times of shortage for supplies to supplement their imports from Niger.

Kumasi Onion Sellers Association: The onion importers association in Kumasi has developed information links with other associations in other countries in the region. In particular, the Onion Sellers Association in Niger and Burkina Faso frequently inform its Ghanaian counterparts about availability, date of arrival, and the prices of the commodity in Ghana to facilitate faster and more efficient intra-regional trade.

4.4.5 Exporters Associations

As noted, Ghana imports substantially more horticultural commodities from the region than it exports. Correspondingly, associations of exporters have not focused on promoting intra-regional trade, in contrast to their attention to facilitating trade with Europe. The major organization is the Ghana Assorted Foodstuff Exporters Association was established in 1989 and had a membership of 200, including 80 females. Although some members export to the region, none of the major activities of the association are specifically targeted at enhancing exports to the West Africa region. The Yam Producers and Exporters Association was registered in 1987. It has 50 members, 8 of whom are females and mainly exports to Europe, although some members export small quantities to West Africa. The Horticulturalist Association of Ghana was formed in 1982 and has 150 members, including only 3 females. There was no record of the Association having facilitated horticultural exports to West Africa.

However, some processed products are now being exported. The main source is ASTEK Company Limited which obtains its mangoes from Burkina Faso and Nigeria and

exports to Mali and Cote d'Ivoire.

Lewin

5. PRINCIPAL CONSTRAINTS LIMITING INTRA-REGIONAL TRADE

5.1 Constraints Expressed by Individual Traders

Individual traders in imported onions interviewed stated the major constrains that affect their marketing business. These constraints related to the following five issues:

- * marketing infrastructure, including roads, transportation and market facilities
- bureaucratic customs and other regulatory procedures
- * macroeconomic policy on exchange rates
- financial resources
- institutional base of traders associations

The traders ranked the specific constraints they identified in descending order of importance shown below.

- Inadequate transport system for carting produce, including bad roads and unreliable transport vehicles.
- 2. Cumbersome customs procedures resulting in long delays at the numerous barriers by the Customs and police officials, especially within Ghana.
- 3. Inadequate marketing infrastructure, including market places, storage and other facilities.
- 4. Lack of finance to fund bulk or larger volumes of imports.
- 5. Unstable exchange rate of the Ghana Cedi to the CFA and the depreciation of the CFA itself after the 1994 devaluation.
- Ineffective traders associations.
- Lack of potable water and convenient shelter in some of the more remote purchasing area: in Bukina Faso, Mali and Niger making it difficult for importers to assemble their purchases.
- 8. Payment of extra charges at police and custom barriers.
- 9. Delayed payments for credit sales to customers.

The to most priority constraint mentioned was the inadequate availability of transport trucks to move the produce from the purchasing areas in the Sahel, especially from northern Niger and from Mali. Often, trucks are simply not available to ply the routes. The other dimension of he problem is that the available trucks are inappropriate for transporting perishable produce as they lack padding, cooled containers, and other necessary requirements. Furthermore, most of the roads in the hinterland of the main import source-countries are in poor shape, and are often barely motorable during the rainy season. The shares of long-distance transportation charges in wholesale marketing costs for imported horticulturals are given in Table 5.1.

Table 5.1

Percent Share of Transport Cost in Wholesale Marketing Cost

| Commodity | Percent Ratio |
|-----------------------------|---------------|
| Onions in Accra | 35 |
| Onions in Kumasi | 30 |
| Potatoes in Accra | 47 |
| Mangoes from Niger in Accra | 48 |

Note that the ratios in Table 5.1 did not include the significant amounts paid at the numerous stops; including these payments would increase the ratios to between 40 percent for onions to about 55 percent for the other commodities.

Because the routes are long and the roads are bad, irregular availability of transport vehicles also results in losses in weight and quality, as traders are unable to speedily move their stocks down south. Furthermore, the trucks available are not suitable for transporting horticultural products as they are not conditioned or refrigerated. Lack of the appropriate conveyance contributes to increased transit losses.

The next most pressing problem identified by the traders was the stops at numerous barriers along the route to Accra: the number of these stops were estimated as 32 from Niger to Accra, out of which 16 are within Ghanaian territory on the journey from Kulungugu to Accra. These stops add an additional 2-3 days to the journey time, resulting in delayed transit times. These delays compound the effect of irregular availability of transportation which results in reduced shelf life.

The delays at border crossings may be justified as part of the duties of customs, immigration, health, officials etc; but customs procedures are not harmonized and are often cumbersome and time-consuming; therefore, traders interviewed considered the numerous stops, especially those within Ghana as unacceptable, with negative effects on the trade.

The other aspect of the problem is the alleged payment of illegal fees by the traders to official; on duty at the posts, which are not documented. From the interviews, the traders indicated a range of these fees as between c300,000 per truck (of about 300 bags of onion of 25 KG each) and c500,000 per trip. These payments raise trading transaction costs and final consumer prices or reduces trading returns.

It is 13 be noted that these stops affect all movements of goods across borders and on the south-bound journey within Ghana to Accra: including livestock, salt, fish and other consumables timber products and non-food non-traditional exports in general. Thus, it is a generic problem affecting transit of goods within the sub-region, but its effects on trade in perishable commodities, such as horticultural products, is significant.

Another major problems is the absence or inadequacy of proper markets and marketing infrastructure for trading in these easily-damaged products. The most lacking facilities are; loading bays for trucks, pallets for stacking bags of onions, storage structures with appropriate cooling and drying facilities, stalls for selling, and, facilities for personal convenience. Again, this is a problem affecting the entire marketing system.

Regarding the trade in imported mangoes, the major peculiar constraints identified by the traders were: low demand, lack of packaging, and, competition from local and other imported hybrids.

5.2 Constraints Expressed by Traders Groups

The problems identified through the group interviews with traders associations expanded the scope of the constraints identified by individual traders. The associations all face similar constraints, which they classified into three categories: production, marketing and organizational issues.

- (a) Production-related problems: dependency on rainfall, inadequate land preparation equipment, and, low technical know-how in production.
- (b) Post-production and marketing problems: The groups mentioned the systemic problems relating to the stops on the way and lack of market infrastructure, especially storage facilities. In addition, they identified the following: inability to advertise their goods as they like to do; lack of scales and measures to standardize weights; and weak knowledge of the market from inadequate market information.
- (c) Problems they face as an organisation: difficult access to the banks for assistance for members, low educational background of members, financial (weak financial position of the association), and, lack of office accommodation and hostel for importers.

5.3 Constraints to private sector participation in agro-processing

Agre-processing takes place within the framework of the overall manufacturing sector in Ghana. Therefore, it is affected by the generic constraints facing manufacturing enterprises in general.

Some of these general constraints are:

- old equipment and technology;
- * extreme competition from imported goods under free trade regimes;
- * inadequate access to financial resources from the financial system;
- high cost of capital due to high interest rates arising from high inflation;
- * high cost of domestic output due to depreciating value of the Cedi currency.

In addition to these general issues, there are some specific constraints to private sector participation in agro-processing of horticultural products. These include the low supply of good quality raw materials. Given the low supply base of domestic agricultural production, little excess remains to be processed. This makes high-volume cost-efficient processing difficult and reinforces the tendency to focus on small scale artisanal processing.

Another peculiar problem is the Ghanaian preference for fresh produce: most of the traditional vegetables utilized in the local diet are consumed fresh or cooked fresh. Thus, the Ghanaian consumer would have to develop the taste for processed vegetables, apart from tomatoes. Furthermore, domestic consumers have a predilection for foreign products, in preference to locally-produced commodities, which likely weakens the demand for domestically-processed horticultural products.

6. RECOMMENDATIONS

6.1 Key Recommendations

The recommendations of the study are geared towards improving the positive impacts of reforms on intra-regional trade flows in West Africa, including expanding Ghana's exports of horticultural products to the region.

1. There is little in Ghana's overall macroeconomic policy framework that militates against increased imports of the three commodities, perhaps except of livestock. However, the declining value of the Cedi tends to make imports more expensive, but, as noted, the real rate of depreciation may be negative, implying a real appreciation in recent years which favours higher imports. It is the policy of the government of Ghana to continue with the policy of market-determined flexible exchange rate. We recommend measures to restore the real value of the Cedi.

Overall, the CFA devaluation and reform of Burkina's export tariff and trade regulatory procedures should induce increased exports to Ghana. However, the authorities need to continuously assess the net effect of movements in the real values of the Cedi and the CFA on trade between partner countries.

- 2. Most of the macroeconomic and sectoral policy barriers have been removed or lowered, but infrastructural and institutional constraints remain as barriers to increasing trade flows. The studies showed that the most pressing marketing infrastructure investments are in: market places, storage, refrigerated transportation, and, packaging plants. For example, the present location of the Rex market is inappropriate; there is the need to relocate it and develop a proper market for horticultural commodities. These investments would facilitate trade in fresh commodities and promote agro-processing.
- 3. The information base supporting the trade needs to be improved, including improving the collection and dissemination of relevant information on commodity supply and demand, economic conditions, state of transport sector and other relevant issues. The Ministry of Food and Agriculture only provides ex-post wholesale and retail prices in selected markets fortnightly. This service needs to be expanded to include horticultural commodities, cross-border prices and prices in key regional markets. The information service should also cover production in major areas, commodity movements, and extraneous situations, such as weather conditions in key growing areas.

Regarding statistics on cross-border trade, the Plant Protection and Regulatory Services Department (PPRSD) of the Ministry of Food and Agriculture (MOFA) needs to be supported with computers and other communication devices, vehicles and technical assistance to enhance its agricultural commodity data functions.

4. To enlance Ghana's exports to the region, there is the need to select some promising commodities to be promoted for export to regional markets. The following, which are already exported, could form the first group: fresh oranges, mangoes, fruit juices, eggplant and lime.

- 5. There is the need to harmonize trade laws, payments regulations and movements of goods and people within the framework of facilitating expanded regional trade in general. Commodity-specific initiatives in trade harmonization need to be part of and integrated with broader efforts.
- 6. Within the context of improving currency transfers to facilitate intra-regional trade, the West African Clearing House and the proposed West Africa Central Bank need to be made operational expeditiously. In addition, banks of both countries should also be encouraged to establish branches at the major border crossing points to ease payments problems associated with the trade. Furthermore, exporters from Burkina to Ghana should be encouraged to utilize the same-day currency transfer facility of the newly-opened branch of the ECOBANK Ltd. in Ougadougou.
- 7. Governments in partner countries need to revive or establish bilateral trade commissions to review, advise on and help resolve trade-related issues between partner countries. This is in the belief that the multilateralist goal of enhancing intra-regional trade can be achieved through effective bilateral relations between partner countries.
- It is instructive to consider the issues relating to the input side in trying to facilitate output trade, as relations in input markets determine the supply response to price and commercial policies. Specific areas include agro-input, labour and credit markets.
- 6.2 Knowledge Gaps and Further Research Needs

The above recommendations take cognisance of exisiting gaps in knowledge, some of which were identified as follows:

(a) production and technology: levels, variability

(b) preservation and storage: techniques, availability of facilities, private investment

(c) processing: extent, constraints marketing: standardization, etc

- (d) marketing: standardization, etc

 (e) tariffs: compilation of regional schedules for main commodity groups, desirable structure for enhancing intra-regional trade
- trade opportunities: Ghana's competitive advantage in commodities for intra-regional trade, actual and potential size of the market for selected commodities, product-specific intra-regional opportunities for trade

(g) institutional base: types of associations, capacity, strengths and weaknesses

(h) finance: available schemes, conditions, accessibility, effectiveness

Based on the research gaps identified, the following are some areas that need to be further analyzed to develop effective and efficient booster programs for intra-regional trade:

(a) requirements for production for export market, including storage and packaging needs and techniques

(b) institu ional characteristics of traders organizations

(c) survey of private sector agro-processing to determine potential for Ghana to increase raw material imports from the sub-region

(d) effective tariff and trade regulations to enhance intra-regional trade

(e) innovative financial schemes for supporting horticultural production and trade

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ANNEX A

Exports of Horticultural Products to ECOWAS Countries: 1993-1995

| | | 1993 | 1994 | 1995 |
|----------------------------|---|-----------------------------|-----------------------------|-----------------------------|
| Product | Countries | Volume Value Kg (\$'000) | Volume Value Kg (\$'000) | Volume Value Kg (\$'000) |
| Pineapple | Gambia Cote D'Ivoire | 178 0.07 | | 84 0.3 |
| Assorted - Vegetables | Cote D'Ivoire Togo | 379 0.17 2,673 1.20 | * * | 5 x |
| Beans | Togo | | | N.A. 2.48 |
| Garden Eggs/ Aubergines | Nigeria Togo | 20,308 6.03 | 4,802 1.26 | 17 0.004 11,978 2.80 |
| | | 1993 | 1994 | 1995 |
| Product | Countries | Volume Value Kg (\$'000) | Volume Value Kg (\$'000) | Volume Value Kg (\$'000) |
| Yam/Cocoyam | Gambia Cote D'Ivoire Liberia Nigeria | 10,540 6.00 | 13,709 7.88 | 304 0.16 286 0.15 |
| Oranges (fresh) | Togo | 911 0.10 | 1,818 0.20 | 132,149 10.39 |
| Lemon/Lime | Togo Bukina Faso | 5,602 1.59 | N.A. 0.62 N.A. 0.65 | 6,000 0.73 |
| Bauana/ Plantain | Gambia Nigeria | | # 3m | 55 .03 18 .01 |
| | | 1993 | 1994 | 1995 |
| Product | Countries | Volume Value Kg (\$'000) | Volume Value Kg (\$'000) | Volume Value Kg (\$'000) |
| Water Melon /Pawpaw | Togo | | | N. A. 0.15 |
| Fresh- berries | Cote D'Ivoire | 5,504 0.34 | | N. A. 0.33 |
| Pepper | Liberia Togo | 22,234 10.90 | 2,696 1.43 | 1,522 0.23 58,032 8.77 |
| Ginger | Gambia | ä le | | 218 .09 |
| Tomatoes | Togo | 30,663 2.90 | 14,718 6.61 | 130,116 12.17 |