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Production/Consumption Trends, Commodity Demand
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Agricultural Sector Assessment, Volume I

Carl E. Shafer

Vito J. Blomo

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The Texas Agricultural Experiment Station
Neville P. Clarke, Director
Texas A&M University System
College Station, Texas 77843

SYRIAN AGRICULTURAL ASSESSMENT PROJECT

Volume 1

Production/Consumption Trends,
Commodity Demand Projections, and
Price Policy Appraisal

Carl E. Shafer and Vito J. Blomo
Texas A&M University

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goals the authors believed to be related directly to price policy are:
(1) To establish prices of agricultural products which will ensure stability for the productive farmer's income and directing agricultural production within the planned targets. (Price stability is implied.)
(2) To mobilize rural manpower to fully utilize agricultural resources and develop the countryside in general. (Reducing migration from rural to urban area is implied.)
(3) To achieve self-sufficiency in the production of main foodstuffs and commodities and to endeavor to achieve increasing rates of self-sufficiency in other commodities.
(4) To improve the citizens' food standards and, in particular, the availability of animal proteins and increase production of fruit and vegetable crops at prices as free from inflation as possible.
(5) To provide the requirements of domestic industry for agricultural raw materials for the production of the required quantities of manufactured goods.
(6) To achieve a surplus for export in order to contribute to reducing the balance of trade deficit.
(7) To achieve real increases in agricultural GNP of 8-10% per year.
(8) To protect both producer and consumer against the domination of market middlemen reaping benefits unwarranted by their services.
(9) To regulate the agricultural market through considerable public directed production and marketing activities but not necessarily to monopolize all stages of commodity production and marketing.

In addition to these somewhat general goals, the agriculture sector has had numerous specific productive and developmental objectives; e.g., increase cereal production by 58%, sugar beets by nine fold, meats by 80% and so on during the fourth five-year plan, [SARG].

Specific programs implemented to accomplish these goals and objectives include a new intensive agriculture plan which has been in effect since 1976 whereby production plans for each province are established by the High Committee in Agriculture with crop production licenses issued accordingly. Predetermined crop rotation patterns are compulsory. The government purchases major crops at support prices established by the Council. The marketing of important feed grain, food grain, and industrial crops is handled by specialized government agencies.

Regulations are issued for the domestic marketing of certain commodities including cereals. The government has price controls on most food items and issues family supply cards permitting specified quantities of sugar, rice, and cottonseed oil to be purchased at considerably less than free market prices. Flour is subsidized to bakeries and bread is sold at very low prices.

Government agencies handle practically all of Syria's agricultural imports and exports. For example, TAFCO, a specialized state trading company imports all rice and sugar, [USDA, 1978]. All prices in the agricultural sector are either fixed or administered by government agencies.

The orientation of the Syrian agricultural pricing policy has included the following characteristics:
(1) Setting farm prices for products marketed by public or cooperative institutions.

(2) Insuring cost-plus farm prices and use of premiums in accordance with
attempts to influence production.
(3) Maintaining the financial position of state marketing institutions
insofar as possible.
(4) Announcing prices before planting season.
(5) Coordinating buying prices in all producing regions.
(6) Establishing prices with regard to grade characteristics.
(7) Considering the forces of supply and demand in fixing wholesale
and retail prices for products marketed by the private sector.
Most such products are for direct consumption such as fresh fruits
and vegetables, meat, eggs, and dairy products.
(8) Basing selling prices of agricultural inputs on cost plus with only
minimum profit or a subsidy to achieve low cost and stability.

Basically there are two types of price systems in Syria:

(1) A system of fixed prices set irrespective of supply and demand
for all crops and inputs marketed by the state or the cooperatives.
Cost of production, production goals for each crop and world prices are
considered in fixing annual crop prices and subsidies. For example,
domestic farm level cotton prices have been set at lower than world
levels, providing substantial revenue to the state from cotton exports.
In contrast, domestic sugar beet prices have been fixed at levels con-
siderably higher than world prices while consumer sugar prices are lower
than world consumer price levels. Nevertheless, sugar beet production
has been difficult to increase. Cereals prices, except for lentils, have
been raised annually, regardless of world prices, in order to increase
production. Maize and soybean prices were set above world levels to
encourage production for the rapidly growing poultry industry, and

(2) A semi-free pricing system where internal market forces of
supply and demand, degree of competition and increasing consumer incomes
are considered in setting prices.[1] Direct consumption items such as
fresh fruits and vegetables, poultry, meat and dairy products are priced
within this market oriented system.

The foregoing goals, objectives and brief discussion of price
programs used by SARG make it abundantly clear that the state is
responsible for the economic performance of agriculture, disregarding
the undue influence of weather. The goals for SARG price policy seem generally
reasonable except that self-sufficiency in all or most agricultural items
seem uneconomic but may be thought necessary for security or other reasons.
The emphasizing of sugar beet production at the expense of cotton may be an
illustration of apparent economic misallocation due to the self-sufficiency
goal. As indicated before, goals are subjective and must be taken as given.
However, from a strictly economic standpoint, it would be useful to
determine the product mix from the commodities with the highest comparative
advantages for Syrian agriculture producing areas, given world markets and
prices as guides to resource allocation in Syria. This is not to suggest

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[1]All prices are fixed or administered by law. Administered prices
are those set by councils at the mohafazat level in accordance with their
reading of supply and demand conditions.

that the previously mentioned goals should be abandoned but rather that
the economic costs of the goals be understood vis-a-vis the "best" market
opportunities for Syrian agricultural commodities at home and in world trade.

A disturbing trend suggested by our interviews was the tacit goal
of the state to monopolize commodity subsectors in addition to the present
cereal, cotton, and tobacco monopolies. The danger in removing viable
private sector competition is the loss of a norm or standard against
which to measure economic performance. The preferred method would be
to maintain a significant volume of private enterprise activity in those
commodity areas where it is possible to promote competition and economic
efficiency. In some cases, such a norm is useful to evaluate the public
sectors--assuming they are not so heavily subsidized that comparison
becomes meaningless.

1.1.2 General Price Policy Considerations

The performance of specific major commodities in view of price goals
and programs will be discussed in Section 1.2. However, it is important
to note the constraints facing the Syrian agricultural economy as it works
towards its goals as well as comment briefly on the uses of price policy
in general. As to the constraints, small farm size, erratic rainfall,
agricultural labor shortage, and a very high rate of population growth
each challenge Syria's capacity to maintain its current level of self-
sufficiency in agricultural production and provide profitable and stable
prices to producers (including input subsidies), and low food prices
to consumers.

Before proceeding with discussion of the general performance of
individual commodity subsectors in Syria, as well as total agricultural
production, it is desirable to consider some of the uses and limitations
of price policy which are applicable in Syria.

The usual objectives of price policy include price stability which
contributes to long-term income support for producers.[1] Price policy
in developing countries has frequently been negative with farm prices kept
low for consumers' benefit. Eventually, it must be recognized that a
viable agriculture sector is vital to the state and that farm
prices be supported rather than depressed. SARG has generally maintained
farm prices at reasonable levels except possibly for cotton.

Use of price policy for encouraging agricultural output raises
numerous implementation problems discussed by Krishna including: (1) which
prices to support and at what levels, (2) geographic distribution of
price supports, (3) assembly methods for supported crops, (4) availability
of input supplies, and (5) the dangers of overplanning. Further, the
question of increasing output and crop allocation by price support and/or
input stabilization merits comment. Consumer issues on the demand side
of the price policy equation and the regulation of intermediate prices
(marketing margins) as occurs in Syria are also of interest. Last but
not least is the question of who benefits and who pays for the subsidies--
taxpayers, consumers, or producers--must be faced.

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[1]The 1.1.2 section draws extensively from Raj Krishna's chaper on
"Agricultural Price Policy and Agricultural Development" in Agricultural
Development and Economic Growth, H. M. Southworth and B. F. Johnston,
Editors, Cornell University Press, 1967.

1.1.2.1 Commodities Supported and Suggested Price Levels

It is generally desirable to keep the number of commodities whose prices are supported as few as possible in order to reduce the heavy administrative burden of an effective price policy. Further, the more commodities whose prices are supported, the smaller the relative price increase for any individual commodity and the more complicated the interactions with other commodity markets.

Assuming that only a small number of commodities which are likely to be in short supply for some length of time will receive price supports, Krishna suggests that price guarantees are expected to work two ways. Price supports should encourage the farmer to (1) use current resources more effectively, and (2) adopt a package of improved inputs and cultural practices. The question of the level at which prices shall be supported is critical and three possibilities are considered: (1) cost of production, (2) parity, and (3) a moving average price. Intercrop price supports must also be considered. Any of these price setting methods could be used to establish floor prices but Krishna recommends the cost of production criteria. However, what cost of production should be used? He suggests the complete average cost of cultivation including neighborhood market values for family land and family labor. Whose average cost of production should be used? The average of a sample of farmers in a particular region? Or the minimum cost producers within the sample? Krishna opts for something called the estimated bulkine cost or the minimum cost which covers the actual average costs of farmers producing a major part of the output. The point is that accurate estimates of production costs are important if they are to be used as price floors. If the suggested crops are in excess demand, then market prices should generally equal or exceed the average cost of production price. In this case, the support price policy stabilizes prices, permitting farmers to plan production activities without fear of disastrously low prices.

Parity is the use of some index of prices paid by farmers as the price floor for a given commodity. If the price index is for production costs only, parity may approximate the above mentioned cost of production method. If consumer prices are included in the parity index, parity price support becomes more of an income redistribution tool and may be less effective in terms of increasing production or reallocating production among crops. That is, it becomes a cost of living type index rather than a production control device. Like cost of production, parity works only on the supply side and ignores demand.

The ruling-price criteria or moving average method links the fixed product price to a simple moving average of prices for recent periods. The advantage here is the reflection of demand when an excess supply situation occurs; i.e., prices would drop. On the other hand, if we are assuming an excess demand situation, then this method might place supports at unduly high levels. Prices would not be as stable under this method as with the cost of production method.

Intercrop price supports or considerations are important because of the interaction effects of support prices among crops. If market prices are usually above support prices, the price floor will not influence crop allocation. However, if price support levels are the prices received by farmers for the major crops then, of course, support prices directly affect land use and production. The latter is clearly the case in Syria where fixed

prices are the exchange prices or prices received by producers for major
crops. The government is the sole marketer for cereals, sugar, coffee,
tea, rice, sugar beets, cotton, tobacco, and peanuts. Wheat, barley, lentils,
cotton, tobacco, sugar beets, and peanuts occupy approximately 75 percent
of irrigated hectares and 90 percent of rainfed hectares. Thus, the
government is not only setting specific prices for the dominant crops
but marketing them as well. If the state were simply supporting prices
at modest levels there would be some reflection of demand from the markets
involved but such is not the case for these crops. So far, apparently
only lentils have provided a surplus problem for SARG at fixed prices. If
excess supply situations at fixed prices began to occur frequently, this
would be a signal that both actual and relative fixed price levels were
maladjusted. Further, price incentives may have to be very high to
reallocated some cropping patterns at the margin; e.g., to get more sugar
beets.

Price support in SARG has followed the cost of production criteria,
not only as a floor price but as the only price for major crops. Cereals
prices were lower than world prices before 1974 but higher since that time.
Cotton prices received by producers have frequently been less than world
prices, providing a margin of profit for the state. Sugar beet prices
have clearly been support prices.

Operating a completely administered pricing program as opposed to
price floors for a few major items removes the direct influence of world
or even domestic supply/demand forces. To date the only major maladjustment
is probably the cotton vs. sugar beets situation. Price policies have
reportedly encouraged sugar beets, a major import crop, at the relative
expense of cotton, the major export crop.

1.1.2.2 Setting Prices Geographically

Turning to the establishment of geographic prices, Krishna argues
that price floors should be the same at all points throughout the country
but differentiated by levels in the marketing system if desired. This is
the case for Syria; for example, the fixed price for wheat is the same
at all mohafazat centers. No differentiation in price is allowed for some
remote market areas within the mohafazats except that large farmers must
pay delivery costs.

There are two main reasons for equating prices among geographic
marketing points throughout the country. First, it is very difficult
to establish a geographically differentiated pricing system which would
reflect the ". . . extremely complex pattern of internal commodity movement"
within a country. Second, the uniform geographic price structure will
motivate marginal shifts from high cost to low cost production areas--
"assuming that the government resolutely maintains internal free trade
in agricultural commodities. Restriction on the internal movements of
goods are highly irrational and should never find a place in any rational
commodity policy." (Italics added). Krishna's point regarding the
flexibility of internal trade and geographic reallocation of production
seems relevant for the SAR because some major crops are not allowed to
move freely among mohafazats and production targets are allocated by regions.
As cultural and technological production practices change it seems important
to permit crop production patterns and actual commodities to move within
the country in response to prices.

If the fixed price is to be obtained by producers, the government should buy as close as possible to the production level--directly from the grower if possible and in unprocessed form. SARG seems to be accomplishing this function. Even purchasing processed produce at mohafazat centers through agents can facilitate the objectives of the program if sufficient competition exists so that margins and transportation costs are reasonable. However, if monopoly is found to exist in processing and marketing, the government can foster competition by initiating processing and marketing of its own and encouraging additional private businesses. SARG has apparently moved well beyond this stage and is now in danger of too little private sector activity.

1.1.2.3 Availability of Input Supplies

If a growth oriented price support program is to prove effective in increasing production rather than simply raising prices, then supplies of inputs such as fertilizers, pesticides, seed, equipment, knowledge, and credit must be readily available. Further, a growth oriented support price should remain in effect at least 3-5 years in order to motivate producers to adopt the desired cultural practices. The price levels can, of course, be altered at the end of the initial period if excess supply is evident.

1.1.2.4 Danger of Overplanning

Krishna and the sector assessment team caution against the pitfalls of overplanning. Theoretically, a system of equations for all relevant crop targets and input prices could be solved for the desired set of product prices. However, this is quite unlikely to be accomplished in practice. Policymakers should content themselves with the modest support of a few major crops, hoping to reduce the excess demand gaps for those crops. Again, the team believes that SARG is too much involved in the marketing side of the food and fiber activities because of their desire to restrain exploitive private middlemen. However, SARG does not necessarily need much of the market to effect such an outcome. Further, excessive government activity may result in higher costs because of the difficulty in administering the complexity of the market; i.e., the matching of prices with quantities produced and consumed (supplied and demanded) during the seasons, year-in and year-out is an extremely difficult task and usually results in shortages or surpluses if strictly enforced. Fortunately, while SARG has established a significant number of marketing requirements, they do not attempt rigid enforcement. Thus, a lot of adjustment does in fact take place at prices other than those set by SARG. No one knows how much price flexibility actually exists. It is presumably well known that significant volumes of commodities are "traded" with Lebanon, Jordan, and Turkey when Syria's prices are significantly different from prices in Syria's large border expanses with other countries make it difficult, if no impossible, to prevent such activity. For example, tobacco organization people estimated that 20 percent of their cigarette sales are lost to smuggled Marlboros and other brands which they do not handle. The present policy of setting prices but tolerating considerable actual price adjustment and inter-country flow of products is probably preferred by the Syrian populance over rigid enforcement of government marketing regulations. The current situation provides definite guidelines but does not straight-jacket the pricing-supply-demand system.

1.1.2.5 Price Support Versus Input Subsidies

All previous discussion has referred to stimulating and reallocating production using product price supports. Alternatively, production may be stimulated by subsidizing inputs. Why use input subsidies? Peasants may not necessarily increase production in response to higher product prices but rather spend the extra income on consumption. However, the peasant benefits from subsidized inputs in direct proportion to their use. Subsidized inputs also avoid raising product prices, and hence, food costs to the consumer. Krishna argues that both supported product prices and subsidized inputs are desirable for different reasons. Note that the more inputs are subsidized, the lower "cost-based product prices" can be.

Krishna cites four reasons why the same production response cannot be obtained through input price subsidies as by product price support. First, peasants not familiar with improved inputs will be hesitant to employ them even if subsidized. Thus, product prices are the best means to initiate a program for increasing production. Further, even when producers willingly employ new as well as traditional inputs, their continued use depends on whether costs are covered by guaranteed product prices. Second, peasants need insurance against falling product prices more than insurance against rising input costs which may be a small part of total costs. Third, product price guarantees motivate better use of traditional as well as improved inputs. It is difficult to subsidize the use of family labor and land which are major cost items. Only fertilizer, pesticides, implements, irrigation, and credit which account for a part of costs can be subsidized. Fourth, input price subsidies do not discriminate as well among products as the use of specific product price guarantees to induce output changes.

Research on U.S. farm response to product support prices suggests consumers got more than their tax money back in lower food prices in the long run.

1.1.2.6 Some Consumer Price Considerations

Consumer prices must also be protected in conjunction with the State's price support program to increase and allocate crop/livestock production. Syria protects consumer prices with price ceilings rationing for rice, sugar, and vegetable oils and possibly the lowest bread prices in the world. The two-price rationing policy for rice, sugar, and vegetable oils and low priced bread subsidize the well-to-do and the poor alike if the well-to-do are willing to accept the inconvenience. Meat prices are set for Damascus consumers and such action is being contemplated for Aleppo. SARG attempts to restrain price movements for other food and a number of non-food items. Alternative policies could include allocating ration cards or food stamps only to low income people, letting others pay the full-cost prices while getting higher quality and greater variety. The team was frequently told of the difficulties of determining who is "low income". Nevertheless, at least for bread, some type of two-price rationing scheme might be considered due to the probability of bread waste occuring at current low prices. Surely it is not a secret that many discriminating consumers buy the higher priced bread from Lebanon. The question again arises as to weather SARG must dominate marketing activities

in order to accomplish their producer and consumer price goals. Krishna
advocates a stock-and-relief policy whereby the government employs stock
accumulation and release to support producer prices and yet maintain
consumer prices of some items below full cost. Some subsidy cost would
still be incurred but the government would not have to operate the
current physical marketing apparatus nor plan for expansion in marketing.
Modest government participation in the market can have the desired
influence on the private sector's marketing of the remainder. This point
should be treated as a technical problem concerning how to obtain the
best performance from the SAR agriculture production/food marketing sector.

1.1.2.7 Marketing Margins and Intermediate Price Regulation

The simultaneous establishing of producer price floors and consumer
price ceilings would seem to solve the problem of the exploitive middlemen
or merchant if such prices could be enforced. Krishna reports that while
many feel that agricultural marketing in developing countries is
monopolistic, little evidence of such activity actually exists. If there
are exploitive monopoly elements in marketing, one solution is to promote
competition by modest government marketing activity while encouraging
more private firms to enter the suspect area. Certainly some reasonable
evidence of adverse market performance should be established before
government enters the arena. Even then there is no need for government
to dominate marketing but rather to serve as an alternative to exploitive
marketers; i.e., not replace them. If there are undue profits in the
market sector, others should be willing to enter the business if encouraged
by government policies. Excess profits should exist only where barriers
to entry exist and/or information is poor. The State can directly improve
both of these conditions if it wishes. There is little evidence to suggest
that government run marketing operations can compete effectively with
competitive private agencies unless government is subsidizing its own
operations.

As to the point of establishing both retail and wholesale prices
and, therefore, fixing margins for commodities passing through the market,
such is practically impossible because of the dynamics of marketing.
Marketing costs vary with (a) distance, (b) storage period, and (c) the
amount of processing. These elements of marketing cost vary widely among
different crops and livestock products and for the same commodity at
different times and locations. The concern about monopolies and speculative
gain within the marketing system can be dealt with by appropriate action
by the state; keep the market in line by supplying part of the market
at a reasonable price and keeping the wholesale price reasonable with
counter-market purchase and release activities. Speculative gain can also
be dealt with by counter-market operations and providing timely economic
forecasts. At any rate, it is almost certain that attempts to regulate
marketing costs are not working in Syria except for possibly for the fully
monopolized crops and products. It was reported that even major crops
cross country boundaries in some volume in response to interstate price
differences. Flour is a tempting resale item at the low subsidized
price. Meat prices in Damascus result in losses to the government due
to the inability to control the price of sheep at the producer level, etc.

1.1.2.8 Who Pays the Subsidies

A theoretical perfectly free market has no subsidies, duties or tariffs to restrain production or consumption. However, subsidies and/or taxes are frequently desirable in order to promote "justice" in the market place or for other social goals.

First, there is the problem of determining the (1) extent of the subsidies within the SARG food and fiber production-marketing system and (2) beneficiaries. Second, it should be determined who pays the subsidies. Bread, sugar, rice, and vegetable oils are all subsidized to some extent and there may be several other commodities subsidized indirectly. All consumers of these items benefit from these subsidies. The extent of the cost of the subsidies is not clear. Some 600 million S.P. are allocated in the state budget for price support activities but the bread program alone frequently uses this much or more in direct costs due to the price difference between wheat and flour.

The cost of the subsidies is born by those providing revenue for the state budget. No detailed examination of the budget was made. If most revenue were from income and rent taxes, then the wealthier citizens would be paying disproportionately for the subsidies and this may be judged as desirable income redistributing effect. As we had difficulty in ascertaining the subsidies for several of SARG's production-marketing operations, we suggest that these figures be compiled annually so as to better assess the cost/benefits of the various programs. Further, only with a full disclosure of subsidy costs, including operating subsidies in addition to price subsidies, can the state evaluate the economic success of its economic and social programs.

In summary, the foregoing discussion on price policy considerations are extremely relevant to SARG's agricultural policy. It is important that SARG officials consider these points as they plan for increased government activities in order to accomplish the stated goals of the 5-year plans. Land reform is being accomplished without the government owning and operating all of the land. Similarly, the government can greatly influence the marketing system without dominating that system.

Planning requires large amounts of data and analyses on economic performance. As indicated in the recommendations, SARG needs a full-time economic staff charged with the responsiblity of evaluating the performance of public and private marketing operations to complement the great amount of work dedicated to planning.

1.2 PRICES, PRODUCTION, AND TRADE TRENDS

In this section trends in (a) agricultural prices at the farm, wholesale, and retail levels, (b) agricultural production, and (c) agricultural trade are discussed. The scope of the discussion includes agriculture in general and a review of each major commodity or groups of commodities as regards to price stability, inflation, self-sufficiency, and price policy implications.

1.2.1 Agricultural Sector

Retail prices for all foodstuffs in 1977 have risen to almost 300% their level from the 1962 base year, or an average compound rate of increase of 7.5 percent per annum (Table 1.1). Retail price increases were much lower in the 1962-72 period (3.4 percent increase per year) than the 1972-77 period when the price index more than doubled, increasing at a compound rate of 16 percent annually. Thus, there are two distinct periods of inflation, the slower period during 1962-72 and the more rapid period during 1973-77.

Retail food prices rose faster in Aleppo than Damascus during the 1968-74 period; but beginning in 1975 prices in Damascus increased more rapidly. Food prices have consistently been above the general Consumer Price Index in both Aleppo and Damascus, thus commanding a greater share of the consumer's expenditures (Table 1.1).

Similarly, the Wholesale Price Index for all foodstuffs has been consistently higher than the Wholesale Price Index for all commodities (Tables 1.1, 1.2). Agricultural raw materials, commodities which would require further processing, experienced the lowest annual price increases. Price stability and lack of inflationary pressures appear to have been acceptable during the 1962-72 period; the 1973-77 period reflects greater price variability and inflationary pressure. As there are no indices of prices for agricultural commodities at the farm level, the Wholesale Price Index for agricultural raw materials was used as a proxy.

Total agricultural production in Syria has been on a positive trend, particularly since 1960 (Table 1.3 and Figure 1.1). The varying production patterns are due mainly to rainfall conditions. The years 1958-60 represent a time of severe drought and in 1961, despite greater precipitation, there was a decrease from normal yields.

Agricultural production per capita reveals a very different situation than total production. Until 1960 agricultural production per capita was erratic, probably due to weather and, possibly, political conditions. From 1960 to 1965 per capita production rose substantially and averaged approximately 105 during 1962-65. However, from 1966 until 1977 the production per capita index only once surpassed the level of the base year and averaged only 81 percent of the 1965 level. Since agricultural exports are relatively minor to agricultural production in this period, and there is agreement that the Syrian diet has improved, this deficiency in domestic production must have been supplemented by large imports due to Syria's ever increasing population (Table 1.4).

Comparisons with other Arab countries (Table 1.5) indicate that growth in Syrian food and total agricultural production has consistently been below the average most Arab countries. While economic, social, political, and

Table 1.1

Consumer Price Index, Wholesale Price Index and Consumer,
Price Index for Foodstuffs, Damascus and Aleppo, 1968-77 (1962 = 100)

Year	Consumer Price Index		Wholesale Price Index	Consumer Price Index Foodstuffs	
	Damascus	Aleppo		Aleppo	Damascus
	— — — — — — — — — — — — — 1962 = 100 — — — — — — — — — — — — — — — —				
1977	268	261	256	282	306
1976	240	235	235	256	271
1975	209	208	209	229	244
1974	192	180	195	207	191
1973	156	164	171	175	166
1972	130	137	129	144	136
1971	129	131	136	139	136
1970	123	126	123	130	131
1969	118	119	115	123	126
1968	126	125	117	125	125

Source: (Central Bureau of Statistics) Statistical Abstract of Syria, various issues
1968-78.

Table 1.2

Wholesale Price Index for Selected Food and Agricultural Items, 1966–77 (1962 = 100)

Year	Flour & Cereals	Dry Legumes	Meat	Fats & Oils	Fruit Seeds, Roots	All Food Stuff	Agriculture Raw Materials
				– – – – –1962 = 100 – – – –			
1977	276	379	478	335	242	281	217
1976	264	321	425	241	222	254	201
1975	226	294	328	197	208	218	187
1974	215	314	305	184	184	205	176
1973	220	245	221	172	173	196	136
1972	135	163	180	160	139	137	114
1971	180	159	145	172	138	157	106
1970	140	152	137	124	122	139	104
1969	121	135	135	124	112	120	103
1968	128	132	138	124	108	122	108
1967	140	136	133	120	115	132	105
1966	112	143	113	117	113	115	101

Source: (Central Bureau of Statistics) Statistical Abstract for Syria, various issues 1966–1978.

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Table 1.3

Indices of Total Agricultural Production
For Syria, 1952-77 (1956 = 100)

Year	Index of Agricultural Production	Index of Agricultural Production Per Capita[a]
	- - - - - - - - - - 1956 = 100 - - - - - - - - - - - - - - -	
1977	174	87
1976	209	109
1975	171	92
1974	164	92
1973	99	63
1972	150	85
1971	107	67
1970	104	66
1969	138	91
1968	103	70
1967	124	87
1966	99	72
1965	136	102
1964	137	106
1963	127	101
1962	130	107
1961	86	73
1960	68	60
1959	77	70
1958	76	71
1957	107	104
1956	100	100
1955	76	79
1954	97	103
1953	86	95
1952	77	88

[a]The index of agricultural production per capita is based on the mid-year population estimates published in the annual Statistical Abstract.

Source: (Central Bureau of Statistics), Statistical Abstract of Syria, various issues 1955-78.
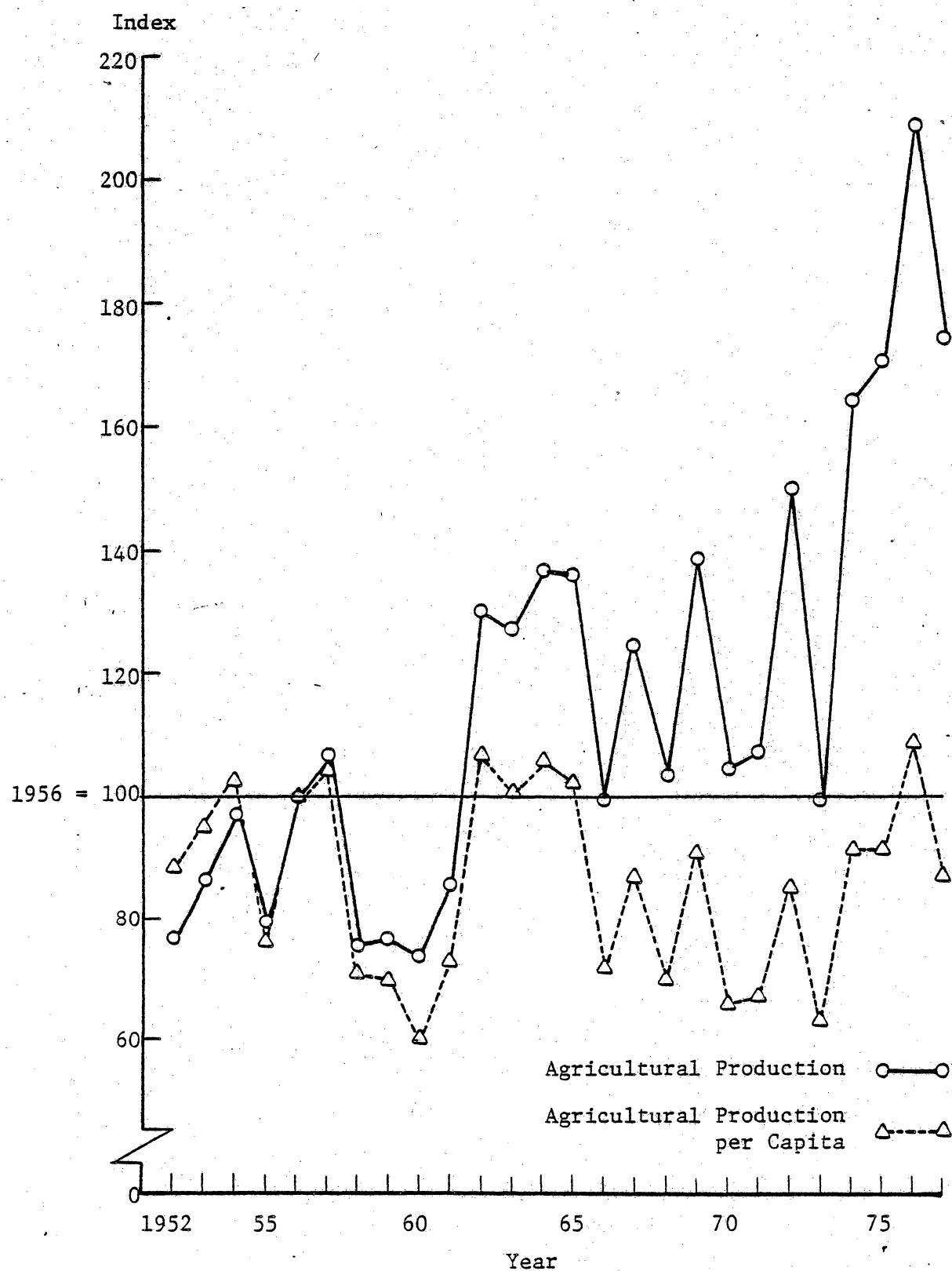
Figure 1.1 Index of agricultural production; total and per capita, Syria, 1952-77.

Source: Central Bureau of Statistics, <u>Statistical Abstract</u>, 1959-78.

Table 1.4
Total Population and Index of Population
In Syria, 1960 - 2000

Population in Syria (Sept.)		Index of Population In Syria
		1956 = 100
2000	17085000 (Proj.)	424
1985	10781000 (Proj.)	268
1978	8316693	207
1977	8009142	199
1976	7712964	192
1975	7438000	185
1974	7240365	180
1973	6994170	174
1972	6756346	168
1971	6526610	162
1970	6304685	157
1969	6130729	152
1968	5956772	148
1967	5782816	144
1966	5608859	139
1965	5434903	135
1964	5260946	131
1963	5086990	126
1962	4913034	122
1961	4739077	118
1960	4565121	113

Source: Syrian Agricultural Assessment Project and State Planning
         Commission.

Table 1.5

Indices of Agricultural Production in Arab Countries,
1967 - 1975, (1963 = 100)

| Country | Food | | | | | | | | |
	1967	1968	1969	1970	1971	1972	1973	1974	1975
Algeria	85	102	94	100	106	99	92	92	85
Egypt	105	118	119	122	126	129	130	132	137
Libya	148	155	142	141	145	258	268	256	264
Morocco	106	148	120	133	144	141	120	145	127
Sudan	127	112	134	139	145	146	149	167	177
Tunisia	81	87	82	97	119	121	125	132	152
Iraq	128	155	143	136	126	186	135	147	137
S.A.R.	105	94	107	80	92	138	77	137	143
Average	111	121	118	118	125	152	137	151	152

| Country | All Commodities | | | | | | | | |
	1967	1968	1969	1970	1971	1972	1973	1974	1975
Algeria	86	103	95	101	107	100	94	93	86
Egypt	104	116	120	121	125	126	128	127	130
Libya	145	152	140	141	145	245	260	245	253
Morocco	106	147	120	138	143	147	128	151	134
Sudan	127	113	135	140	145	147	146	165	174
Tunisia	82	88	83	98	120	123	126	133	154
Iraq	130	156	145	139	128	185	137	148	139
S.A.R.	103	96	106	85	96	132	84	132	135
Average	110	121	118	120	126	151	138	149	151

Source: (Central Bureau of Statistics), Statistical Abstract for Syria, various 1967-1975.

natural resource conditions vary greatly among these Arab countries, relative changes over the nine-year period provide general perspective.

Total plant production in Syria has varied greatly from year-to-year (Table 1.6 and Figure 1.2). Animal production exhibits less year-to-year variation but appears cyclical, (Table 1.6 and Figure 1.3). Total animal production increased substantially in the 1970's while production per capita generally lagged behind the 1964-65 level. Rising real incomes for Syrian consumers have created upward pressures on prices and elicted a demand for food imports to satisfy food needs and/or dampen price pressures.[1]

Agricultural products are very important in Syria's trade situation (Table 1.7). Agricultural exports, whose value has been increasing since 1970, account for a substantial portion of the value of total exports. However, the value of agricultural imports has increased much more rapidly than exports; in fact, the average growth in import value between 1970/71 and 1976/77 was 19% per annum, compared with an average 14% annum for the value of agricultural exports. As surmised above, agricultural imports must have supplemented domestic production if the Syrian diet has actually improved. This is evident in the fact that in the eight-year period 1970-77, five years registered a considerable trade deficit (Table 1.7).

Among major commodity groups (in total value and as an index of quantities), only the value of imported live animals and of meat and meat preparations has stabilized or decreased (Table 1.8). Imported values of all other commodity groups, especially dairy and eggs, fruits and vegetables, cereals, and sugar increased substantially during 1970-77. In terms of quantities imported, only live animals and oil seeds, oil nuts, and oil kernels have shown a significant decrease; all other commodity groups have either increased greatly or were at the same level in 1977 as in 1970 (Table 1.9).

Agricultural exports indicate a mixed picture. "Food and live animals" exports showed no trend in value with various commodities either increased in value (fruits and vegetables, cotton) or decreased in value (fruits and vegetables, cotton) or decreased in value (live animals, animal feed, oils and fats), (Table 1.10). Indices of quantities exported indicate that every commodity group except (a) dairy and eggs and (b) fruits and vegetables have either remained stable or declined (Table 1.11).

The import-export situation can also be examined as the trade balance among commodity groups (Table 1.12). The trade deficit in 1977 for the overall group of food and live animals was five times larger than in 1970. Every commodity group except (a) textile fibers and (b) oil seed and oil nuts has had a trade deficit. In terms of production self-sufficiency (Table 1.13) only potatoes and eggs appear to be gaining; all other commodities show either no trend (wheat, maize, vegetables, fruits) or greater reliance on imports (tobacco and sugar). Domesitc production and imports are increasing for most items.

In summary, agricultural production in Syria has grown in response to increased demand from both population pressure and greater real incomes per capita. As well as price support programs. However, domestic production

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[1]GDP per capita in constant 1963 prices increased by 61 percent between 1965/66 and 1975/77; i.e. 4.87 percent per year.

Table 1.6

Indices of Plant and Animal Production for Syria,
1953-77 (1956 = 100)

Year	Plant Production		Animal Production	
	Total	Per Capita	Total	Per Capita
- - - - - - - - - - - - 1956 = 100 - - - - - - - - - - - - - -				
1977	189	95	202	101
1976	245	128	198	103
1975	196	106	171	92
1974	209	116	120	66
1973	101	58	131	75
1972	197	117	91	54
1971	125	77	100	62
1970	100	64	121	77
1969	128	84	131	86
1968	110	74	132	89
1967	126	87	126	87
1966	89	64	136	98
1965	133	99	147	109
1964	138	105	132	101
1963	129	102	119	94
1962	144	118	78	64
1961	94	80	57	48
1960	72	64	56	49
1959	79	68	68	59
1958	74	67	78	71
1957	119	115	95	92
1956	100	100	100	100
1955	63	65	88	90
1954	101	107	93	98
1953	86	95	92	101

Source: (Central Bureau of Statistics), Statistical Abstract for Syria, various issues 1955-78.
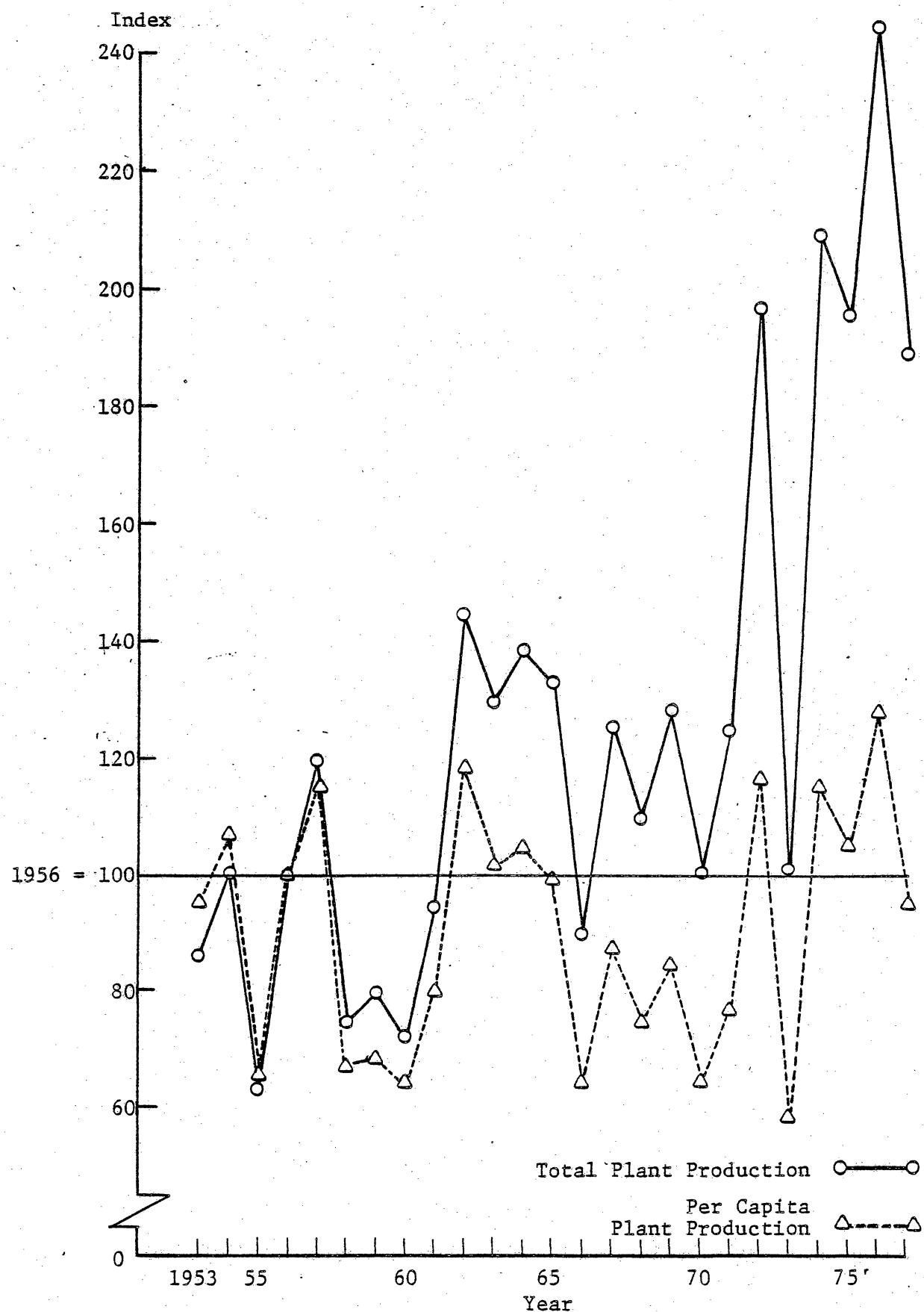
Figure 1.2 Index of plant production; total and per capita, Syria, 1953-77.

Source: Central Bureau of Statistics, _Statistical Abstract_, 1959-78.
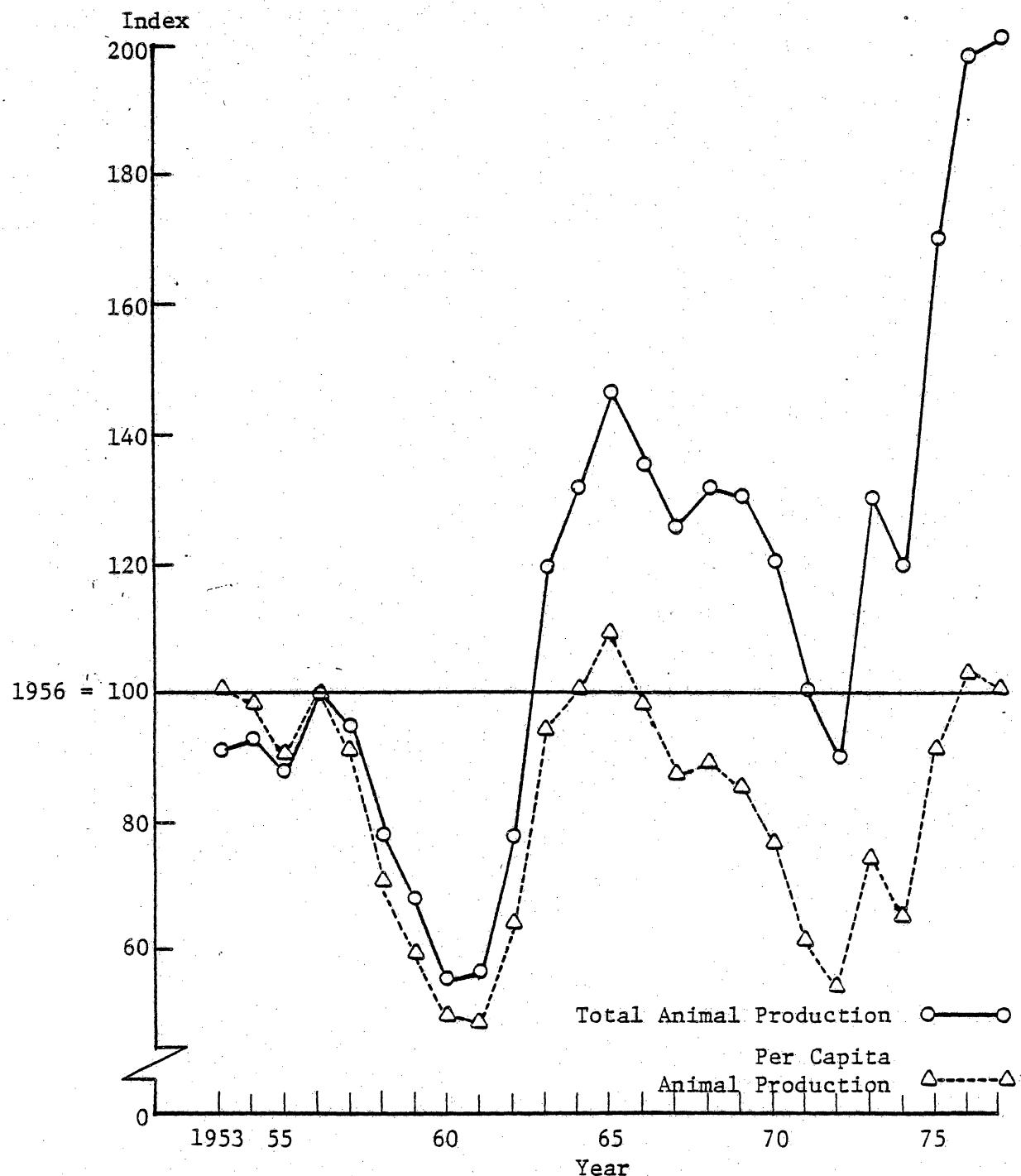
Figure 1.3 Index of animal production; total and per capita, Syria, 1953–77.

Source: Central Bureau of Statistics, <u>Statistical Abstract</u>, 1959–78.

Table 1.7

Value of Import, Export, and Trade Balance of Syria, Total and Agricultural Products, in Current Syrian Pounds, 1970-77[a]

Years	Total Exports	Agri. Exports	% Ag./ Total	Total Imports	Agri. Imports	% Ag./ Total	Total Trade Balance	Agri. Trade Balance	% Ag. Total
	1	2	2÷1	3	4	4÷3	1-2	2-3	1-2÷2-3
					Thousand L.S.				
1977	4199022	1260853	30.0	10496686	1645001	15.7	-6297664	-384148	6.1
1976	4141319	1041625	25.1	7694573	1530839	19.9	-3553254	-489214	13.8
1975	3440914	753085	21.9	6172728	1528955	24.8	-2731814	-775870	28.4
1974	2913960	1069788	36.7	4570879	1612969	35.3	-1656919	-543181	32.8
1973	1341276	830887	61.9	2342068	762610	32.6	-1000792	68277	-
1972	1097601	749060	68.2	2060648	608525	29.5	- 963047	140535	-
1971	743353	475174	63.9	1674365	672153	40.1	- 931012	-195291	21.0
1970	775343	556659	71.8	1365609	454002	33.2	- 590266	102657	-

[a]Agriculture includes food and live animals; beverages and tobacco; crude materials; inedible products except fuel and metals; animal and vegetable oils and fats.

Source: (Central Bureau of Statistics), Statistics of Foreign Trade of Syria, issues 1970-1977.

Table 1.8

Value of Imports of Agricultural Products of Syria,
in Current Syrian Pounds, 1970-77

Item	1970	1971	1972	1973	1974	1975	1976	1977
				-----Thousand L.S.-----				
Food & Live Animals	353133	563942	467517	558404	1170133	1114453	1053078	1124339
Live Animals	13088	13417	21913	20847	29771	25419	8220	10741
Meat & Meat Preparations	3381	6454	4467	8331	76330	31001	8582	13538
Dairy & Eggs	24821	54366	56175	76817	94602	103878	180746	207936
Cereals & Cereal Preparations	169100	264653	130135	121244	376331	295578	219900	334133
Fruit & Vegetables	62955	81907	85645	106881	130203	130668	205510	240271
Sugar & Honey Preparations	41315	103908	116026	142774	367491	441181	319802	149877
Animal Feed	3067	6258	9006	14890	19259	19973	27144	51074
Tobacco	12799	11698	23982	35082	76419	150439	203969	62502
Oil Seeds, Oil Nuts	945	3264	2278	7458	110334	1179	10999	8792
Textile Fibres	24340	21079	31045	44125	58158	76230	48603	62102
Animal & Vegetable Oils & Fats	5297	23055	20751	16230	31906	47124	40379	63783

Source: (Central Bureau of Statistics), Statistics of the Foreign Trade of Syria, issues 1970-1977.

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Table 1.9

Index of Quantities Imported to Syria, 1966-77 (1970 = 100)

Item	1966	1967	1968	1969	1971	1972	1973	1974	1975	1976	1977
					— — — — 1970 = 100 — — — — —						
Food & Live Animals	70	56	77	65	135	93	89	111	96	100	128
Live Animals	117	73	137	157	82	106	99	77	42	25	22
Meat & Meat Preparations	107	78	68	50	153	79	222	745	381	95	173
Dairy & Eggs	33	41	88	85	148	147	163	172	134	205	246
Cereals & Cereal Preparations	58	37	59	29	138	68	31	60	59	41	87
Fruit & Vegetable	96	97	106	96	129	114	144	158	140	187	203
Sugar, Preparations & Honey	52	74	57	86	184	129	129	144	126	156	107
Animal Feed	70	48	53	175	167	226	345	283	583	559	1157
Tobacco	19	28	49	39	84	51	110	271	615	755	232
Oil Seeds, Oil Nuts	74	55	121	57	78	86	20	2	2	–	2
Textile Fibers	73	73	89	92	81	99	96	87	133	88	96
Animal & Vegetable Oils & Fats	133	133	198	183	241	223	159	169	276	207	133

Source: (Central Bureau of Statistics), Statistics of Foreign Trade of Syria, issues 1970-1977.

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Table 1.10

Value of Exports of Syrian Agricultural Products,
in Current Syrian Pounds, 1970-77

Item	1970	1971	1972	1973	1974	1975	1976	1977
	-------------------------------------Thousand L.S.-------------------------------------							
Food & Live Animals	176279	90320	258432	181888	98943	88213	151014	205336
Live Animals	70474	24932	59808	50051	12086	12544	3422	4565
Meat & Meat Preparations	583	554	506	269	104	45	429	224
Dairy & Eggs	2670	797	1990	994	937	1586	1885	1812
Cereals & Cereal Preparations	22585	365	95751	47610	2988	1468	36958	60494
Fruit & Vegetables	31231	47253	60441	46780	50354	55474	81447	119563
Sugar & Honey Preparations	747	1177	2027	2008	2042	3544	6421	7733
Animal Feed	21489	12282	31742	9905	10631	4416	9213	2983
Tobacco	17614	13956	20303	45069	66898	81548	93183	19069
Oil Seeds & Oil Nuts	7359	8940	12393	9678	7139	8161	9085	14590
Textile Fibres	330738	344253	425979	539533	785123	480546	686697	901912
Oils & Fats	10844	3194	159	230	587	1202	1317	1884

Source: (Central Bureau of Statistics), Statistics of the Foreign Trade of Syria, issues 1970-1977.

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Table 1.11

Index of Quantities Exported from Syria, 1966-77 (1970 = 100)

Item	1966	1967	1968	1969	1971	1972	1973	1974	1975	1976	1977
						-1970 = 100					
Food & Live Animals	109	119	136	155	50	85	46	33	36	27	44
Live Animals	144	99	161	142	33	59	47	11	17	3	2
Meat & Meat Preparations	485	186	265	59	101	90	51	9	7	73	55
Dairy & Eggs	177	231	169	142	13	15	26	143	117	173	215
Cereals & Cereal Preparations	10	19	59	153	-0-	21	3	0.1	–	37	71
Fruit & Vegetables	140	248	227	270	168	196	73	106	115	96	149
Sugar, Preparations & Honey	–	–	–	–	–	–	–	–	–	–	–
Animal Feed	150	97	110	149	45	97	26	21	12	16	4
Tobacco	10	23	35	37	66	77	36	47	83	68	27
Oil Seeds, Oil Nuts	101	96	118	191	117	128	98	47	48	65	99
Textile Fibers	122	85	75	92	90	91	93	84	76	88	92
Animal & Vegetable Oils & Fats	176	98	119	84	27	-0-	-0-	–	7	17	–

Source: (Central Bureau of Statistics), Statistics of the Foreign Trade of Syria, issues 1970-1977.

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Table 1.12

Value of Trade Balance of Agricultural Products in Syria,
in Current Syrian Pounds, 1970-77

Item	1970	1971	1972	1973	1974	1975	1976	1977
				—Thousand L.S.—				
Food & Live Animals	-176854	-473622	-209085	-376516	-1071191	-1026240	-902064	-919003
Live Animals	57386	11515	37895	29204	- 17685	- 12875	- 4798	- 6176
Meat & Meat Preparations	- 2798	- 5900	- 3961	- 8062	- 76226	- 30956	- 8153	- 13314
Dairy & Eggs	- 22151	- 53569	- 54185	- 75823	- 93665	- 102292	-178861	-206124
Cereals & Cereal Preparations	-146515	-264288	- 34384	- 73634	- 373343	- 294110	-182942	-273639
Fruit & Vegetable	- 31724	- 34654	- 25204	- 60101	- 79849	- 75194	-124063	-120708
Sugar & Honey Preparations	- 40568	-102731	-113999	-140766	- 365449	- 437637	-313381	-142144
Animal Feed	18422	5754	22736	- 4985	- 8628	- 15557	- 17931	- 48091
Tobacco	4815	2258	- 3679	9987	- 9521	- 68891	-110786	- 43433
Oil Seeds & Oil Nuts	6414	5676	10115	2220	- 103195	6982	- 1914	5798
Textile Fibres	306398	323174	394934	495408	726965	404316	638094	839810
Animal & Vegetable Oils & Fats	5547	- 19861	- 20592	- 16000	- 31319	- 45922	- 39062	- 61899

Source: (Central Bureau of Statistics), Statistics of the Foreign Trade of Syria, issues 1970-1977.

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Table 1.13

Imports of Agricultural Products (Thou. M.T.) as a Percentage of Domestic Production for Syria, 1961-77.

Year	Wheat	Rice[a]	Barley	Maize	Potatoes	Sugar	Tobacco	Dairy	All Vegetables	All Fruits	Eggs
						Percent					
1977	37.6		0	22.6	8.7	950	13.9	4.3	3.1	27.4	4.2
1976	10.5		0	44.1	4.0	657	51.7	3.2	3.0	30.5	6.6
1975	18.2		0	48.1	7.4	738	41.7	2.0	2.3	25.7	7.9
1974	13.4		4.8	2.1	13.7	1250	33.0	3.2	3.8	30.4	24.6
1973	20.0		0	30.7	9.2	1122	11.8	4.4	5.3	50.3	24.9
1972	19.9		0.4	16.0	15.3	442	12.1	3.4	1.5	28.1	51.9
1971	88.5		29.2	37.5	20.3	678	10.7	3.4	3.6	40.3	46.3
1970	86.8		24.6	10.0	16.5	n.a	18.2	1.8	5.3	35.5	28.5
1969	14.2		0	1.1	17.2	n.a	5.5	1.4	2.2	27.1	21.5
1968	51.2		0	86.3	17.0	n.a	11.3	1.0	2.2	32.6	14.0
1967	15.4		1.6	2.2	38.7	n.a	5.0	0.6	3.0	30.5	6.6
1966	50.7		0	110.0	23.0	n.a	3.1	0.5	9.1	27.9	1.8
1965	6.0		0	84.3	-	n.a	-	0.6	3.8	32.9	0.7
1964	0.4		0	35.7	-	n.a	-	0.7	4.2	39.3	0.7
1963	0.7		0	4.3	-	n.a	-				
1962	18.6		2.6	101.0	-	n.a	-				
1961	24.6		3.4	165.7	-	n.a.	-				

[a]All rice imported during 1961-1977.

Source: (Central Bureau of Statistics), Statistical Abstract for domestic production, and Statistics of the Foreign Trade of Syria for quantities of imports, various issues 1964-78.

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has not been able to satisfy consumer demand as evidenced by (1) upward
pressures on food prices at the wholesale and retail levels, and (2) ever-
increasing food imports and trade deficits, resulting in little, if any
progress in achieving self-sufficiency. In the following sections each
major commodity or group of commodities is discussed relative to the
issues above.

1.2.2 Cereals

Cereals are the main staple in the Syrian diet. Government policy
is to assure (1) adequate total supplies for consumption and (2) reasonable
prices for producers and consumers.

1.2.2.1 Wheat

Of the cereals group, wheat is by far the most important commodity.
Domestic production is generally trending upward with large annual fluctuations
due to changing climatic conditions (Figure 1.4). Because of frequent
shortfalls in domestic production, sizable imports have been secured to
provide supplies for consumption[1] (disappearance) at levels necessary to
assure relatively stable per capita levels with the exception of 1973.
Wheat imports continue to provide a significant share of Syria's consumption.
The price policy for wheat may well be increasing production although
it has generated substantial subsidy costs to the government. Farm prices
for wheat have more than doubled since 1967 (Table 1.14), thus increasing
wheat farmers' income and encouraging more production (see Appendix Table
A1 for price/hectares harvested correspondence). At the retail level,
the prices of wheat, cereals, and related products have been very stable.
Deflating these prices by the general Consumer Price Index indicates they
have actually been declining in real terms (Tables 1.15-1.17). Cereals and
related products represent seven to ten percent of the Price Index. The
farm price for wheat has been greater than the retail price of the most
inexpensive bread since 1973. Price increases at the wholesale level for
wheat, flour, and cereals dramatically illustrate the difference between
retail prices and wholesale prices (Tables 1.16-1.19). This difference
is subsidized by the government. The table below indicates the annual
amounts paid to the flour mills since 1975 to make up the difference between
the cost of producing flour and the price bakeries are charged.

Year	Subsidy
1975	294 million L.S.
1976	331 million L.S.
1977	379 million L.S.
1978	400+ million L.S. (prelim.)
1979	500+ million L.S. (projected)

Source: General Company for Cereals

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[1]This figure does not account for seed, waste, or any change in the
stocks of wheat. The disappearance estimates used herein are derived by
adding production, imports, and stocks and substracting exports.

Figure 1.4 Production and gross and per capita wheat disappearance, Syria, 1962-77.

Source: Appendix Table A39.
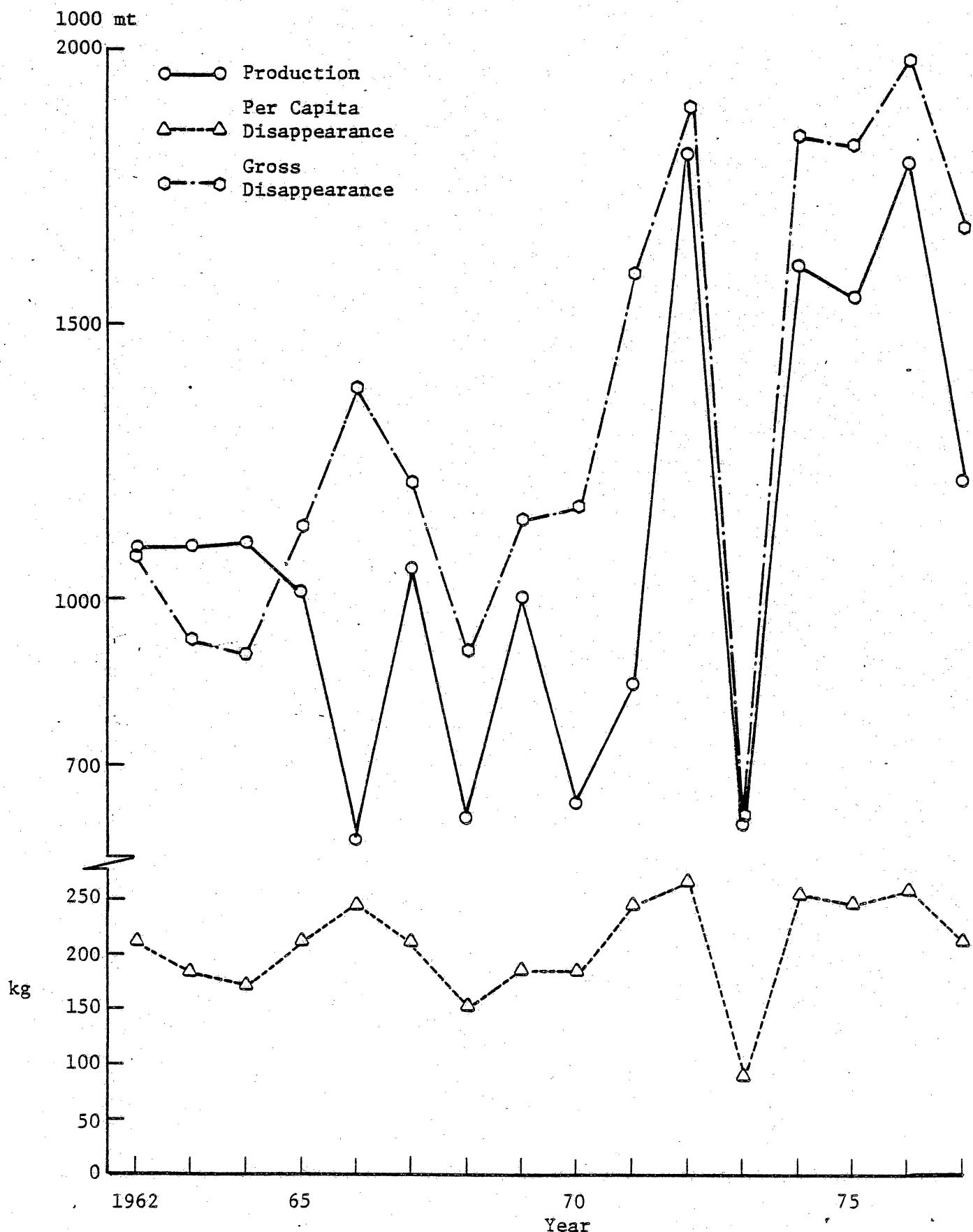
Table 1.14

Government Supported Farm Prices for Selected Agricultural Commodities In Syria,
in Current Syrian Pounds, 1965 - 1978[a]

Year	Wheat		Barley		Lentils (Red)	Chick Peas	Seed Cotton	Peanuts (Red)	Sugar Beet
	Soft	Hard	Black	White					
					- - - - Piasters/KG - - - -				-Pounds/Ton
1978	64	69	50	51	80	160	183	180	150
1977	60	63	44	45	100	100	170	160	145
1976	50	52	40	41	125	100	145	150	140
1975	50	52	40	41	115	-	135	150	140
1974	44	46	35	35	60	-	115	120	130
1973	37	38	28	28	50	-	90	85	88
1972	32	33	23	23	44	-	84	-	70
1971	27	30	18	18	40	-	80	-	-
1970	30	30	13	13	45	-	80	-	-
1969	29	30	15	16	36	-	80	-	-
1968	29	30	15	16	-	-	80	-	-
1967	28	29	19	21	-	-	78	-	-
1966	n.a	n.a	n.a	n.a	-	-	75	-	-
1965	n.a	n.a	n.a	n.a	-	-	76	-	-

[a]Does not include bonus for early delivery.

Source: Ministry of Agriculture and Agrarian Reform, Price Division.

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Table 1.15

Consumer Price Index for Selected Food Items in Damascus and Aleppo, 1968-77 (1962 = 100)

Year	Cereals & Related Products		Dried Legumes		Meat, Fish Eggs		Oils		Sugar & Sweets		Milk & Dairy		Vegetables		Fruits	
	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D
1977	169	184	296	331	385	355	272	319	196	222	295	315	313	454	378	412
1976	165	163	263	251	358	334	247	307	194	208	249	255	279	367	304	339
1975	166	167	303	264	297	295	227	229	170	197	232	233	213	232	321	300
1974	166	162	306	277	295	244	194	184	151	122	227	215	153	176	241	224
1973	159	156	215	197	201	169	171	168	125	115	199	195	171	190	227	203
1972	120	171	113	111	174	136	159	163	103	102	169	164	135	149	190	184
1971	125	120	131	121	145	124	156	159	103	101	164	169	140	150	165	151
1970	125	123	139	126	136	125	114	134	119	118	131	128	121	150	168	166
1969	121	120	138	108	130	116	112	130	118	118	134	122	106	149	141	156
1968	126	123	139	103	136	123	111	118	117	118	134	120	101	145	137	147

A - Aleppo

D - Damascus

Source: (Central Bureau of Statistics), Statistical Abstract of Syria, various issues 1968-78.

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Table 1.16

Retail Cereal and Legume Prices in Damascus in current Syrian Piasters, 1963-77.

Year	White/Bran Bread	White Barley	Flour	Lentils, red 1st grade	Broad Beans	Dry Beans	Chick Peas
				-Piasters/KG			
1977	55/35		125	160	166	217	227
1976	55/35			150	147	195	115
1975	55/35	52	85	135	152	185	93
1974	55/35	56	85	147	155	185	113
1973	55/35	52	72	103	122	169	125
1972	55/35	26	53	44	85	145	127
1971	- /35	41		51	98	149	115
1970	- /35	36	53	56	88	91	99
1969	- /35	-	-	65	85	86	58
1968	- /35	-	-	57	75	100	59
1967	- /32	-	-	60	78	93	63
1966	- /30	-	-	64	79	108	70
1965		-	-	-	-	-	-
1964		-	-	-	-	-	-
1963	35/-	-	-	-	-	-	-

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Source: (Central Bureau of Statistics), Statistical Abstract of Syria, various issues 1971-77.

Table 1.17

Retail Cereal and Legume Prices in Aleppo in Current Syrian Pounds, 1963–77.

Year	White/Bran Bread	White Barley	Flour	Lentils red, 1st grade	Broad Beans	Dry Beans	Chick Peas
				Piasters/KG			
1977	55/35			152	165	197	213
1976	55/35			140	152	195	123
1975	55/35	51	88	121	140	198	90
1974	55/35	52	92	121	139	186	102
1973	55/35	52	79	94	113	158	126
1972	55/35	32	53	47	71	156	136
1971	55/35	44	–	55	70	170	117
1970	55/35	33	55	70	73	100	82
1969	55/35	–	–	74	69	97	51
1968	55/35	–	–	59	68	99	57
1967	55/32	–	–	69	63	100	64
1966	55/30	–	–	64	65	89	65
1965	–	–	–	–	–	–	–
1964	–	–	–	–	–	–	–
1963	35/–	–	–	–	–	–	–

Source: (Central Bureau of Statistics), Statistical Abstract for Syria, various issues 1963–1977.

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Table 1.18

Wholesale Cereal and Legume Prices in Damascus in Current Syrian Pounds, 1963-77

Year	1st Grade Wheat	Farka Flour	Lentils, Red, 1st Grade	Broad Beans	Dry Beans	Chick Peas	White Barley
				Piasters/KG			
1977	70	100	140	152	177	185	65
1976	69	–	125	133	176	95	60
1975	60	65	117	128	175	85	50
1974	53	71	137	140	175	96	45
1973	54	67	95	107	134	114	50
1972	35	50	41	71	134	117	25
1971	46	50	43	84	141	102	39
1970	41	50	44	78	83	87	32
1969	33	–	57	76	81	51	16
1968	33	–	51	67	96	47	17
1967	37	–	46	67	78	55	28
1966	33	–	54	68	79	62	24
1965	–	–	–	–	–	–	–
1964	–	–	–	–	–	–	–
1963	23	–	–	23	–	–	18

Source: (Central Bureau of Statistics), Statistical Abstract of Syria, various issues 1965-77.

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Table 1.19

Wholesale Cereal and Legume Prices in Aleppo in Current Syrian Pounds, 1963-77

Year	1st Grade Wheat	Farka Flour	Lentils, Red, 1st Grade	Broad Beans	Dry Beans	Chick Peas	White Barley
				Piaster/KG			
1977	65		132	135	173	178	60
1976	63		118	132	173	98	58
1975	57	75	105	113	176	72	44
1974	54	81	93	118	171	84	47
1973	52	72	89	90	135	114	49
1972	34	51	36	56	142	124	25
1971	45	51	44	57	129	101	39
1970	39	51	59	63	84	72	29
1969	33	–	64	64	77	43	16
1968	36	–	48	48	84	42	16
1967	43	–	52	47	85	48	28
1966	28	–	50	54	81	48	23
1965	–	–	–	–	–	–	–
1964	–	–	–	–	–	–	–
1963	23	31	–	37	–	–	15

Source: (Central Bureau of Statistics), Statistical Abstract of Syria, various issues 1965-77.

The subsidy cost situation has been exacerbated by the fact that while world cereals prices have declined since 1974 (Appendix Table A3), farm cereal prices in Syria have steadily increased and now exceed world levels significantly. A continuation of the present price policy, in conjunction with the self-sufficiency goal, would tend to increase the subsidy.

The policy of equalizing retail prices among all mohafazats creates an income transfer from low income areas like Deir Ezor to higher income areas like Damascus. However, differentiating bread prices among mohafazats would encourage smuggling.

1.2.2.2 Barley

Barley is the principal feed grain for livestock and poultry. A review of production and gross disappearance[1] indicates no discernible trend for either measure (Figure 1.5). Until the mid-1960's Syria was a net exporter of barley (production greater than disappearance in Figure 1.5) to Western Europe. However, the advent of higher and variable tariffs and lower quotas by the EEC effectively shut out Syrian barley from this market [Ramazani, p. 25]. Syria appears to be self-sufficient for its current barley needs in that imports have been negligible since 1961.

The lack of a clear positive trend for barley production does not portend well for an increase in livestock and poultry production. This lack of trend exists despite increasing barley prices (Table 1.14). Hectares response to higher prices is not apparent except possibly for 1975-77 (Appendix Table A1). Some of the lack of direct price response is due to barley being priced at a disadvantage relative to wheat. This lack of price response points up a basic problem in the administered pricing scheme, particularly when prices are fixed before planting. The problem is that the total area of wheat and barley plantings may be more influenced by weather than price. Despite the announcement of prices, wheat and barley plantings are reduced for a given area if rainfall in October/November is not adequate. If rainfall in January is not adequate the next planting alternative, legumes, are reduced. Finally, if rainfall in March/April is not adequate, then plantings of other grains--millet and sorghum--are reduced. Thus, despite planning, weather may ultimately have a greater impact on supply than the planned price. The vagaries of weather present a formidable problem in planning for adequate cereal supplies.

Barley prices at the three marketing levels (Tables 1.14, 1.16-1.19) exhibit an upward trend. Unlike wheat, Syrian barley prices have remained below the world levels (Appendix Table A3); thus exports would generate a monetary surplus for the exporting authority (Cereals Bureau). The spread between wholesale and retail prices indicates that a subsidy would be required because the difference does not appear to cover the marketing costs. Subsidies appear necessary between the farm and wholesale levels. In 1978, the Cereals Bureau reported buying black barley at 530 L.S./metric ton cost for handling, storage, interest costs, etc.

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[1]Hereafter, gross disappearance refers to production plus imports plus changes in stocks minus exports and does not account for waste or seed.

1000 mt
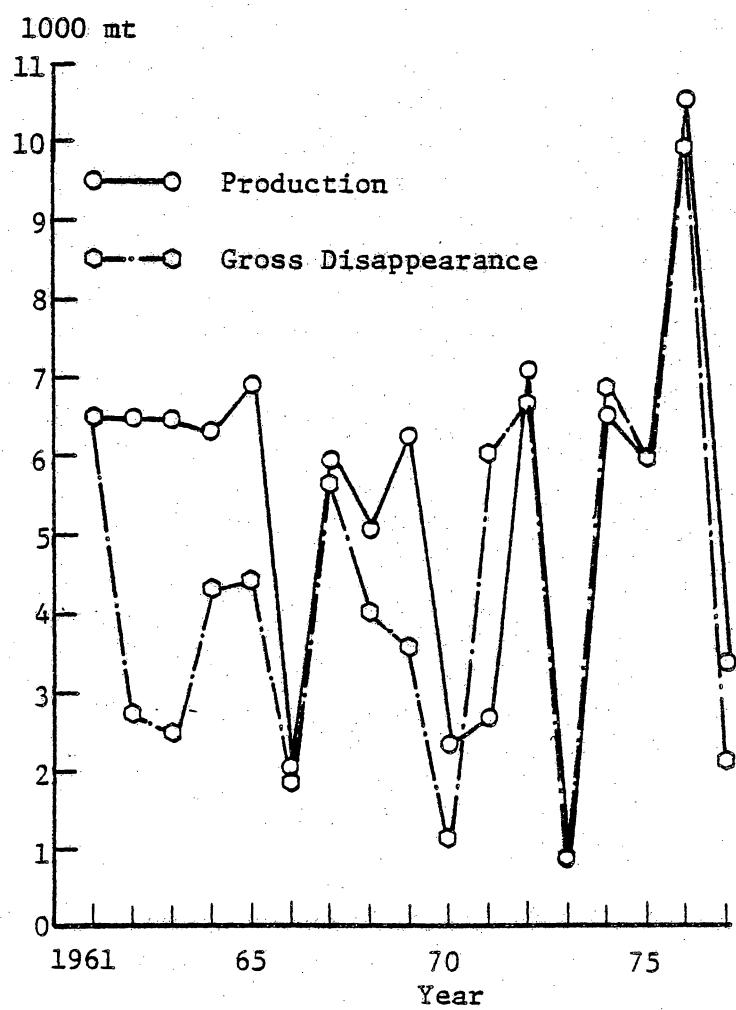
Figure 1.5 Production and gross disappearance
of barley, Syria, 1961-77.

Source: Appendix Table A41.

Thus, a subsidy would have been at least 188 L.S. for every metric ton the Cereals Bureau purchases.

1.2.2.3 Maize

Maize is fed primarily to poultry. The significant increases in maize production (Figure 1.6) parallel the increase in poultry and egg consumption. Syria is not now dependent on imports because of increasing domestic production. The performance of the poultry industry should generate more demand for maize, hence justifying higher production. Greater imports may also be required buy may be economical if the poultry industry continues to expand.

1.2.2.4 Rice

Almost all rice consumed in Syria is imported. Because rice is such a heavy user of scarce water resources, government policy is to issue a few permits as possible to grow rice in preference to other crops. The per capita disappearance indicates a 6.7 kg average consumption for 1964-77, excluding 1974[1], Figure 7. Total disappearance is rising due to an increasing population, holding per capita consumption to 6-7 kg as it has been since 1964.

Since 1973, when cereal prices rose sharply, government policy has been to insure a "normal" amount of rice to consumers at subsidized prices. If consumers wish to consume more they may do so at a higher price. Retail and wholesale rice prices from 1963-72 rose an average of 2.3 per year Table 1.20). However, the price increase from 1972-1973 was 81% at retail and 85% at the wholesale level. Thus, to insure price stability and an adequate consumer supply, a voucher system was established whereby consumers could purchase 750 grams per month per capita at the (1972) voucher price. Purchases in excess of the voucher amount are subject to a higher price.

Since 1973 market and voucher prices at the wholesale and retail levels have been constant; thus, taking inflation into account, real rice prices have been decreasing. According to the Planning Directorate in the Ministry of Supply and Internal Trade, projected disappearance for 1979 will be 98,000 metric tons. Using the 215 piaster/kg imported cost of rice, the 1979 population, per capita voucher allowance and 1978 prices, the following subsidy is projected for 1979:

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   210.7 million S.P. cost for 98.00 M.T.
-   51.8 million S.P. voucher sales of 6,477 M.T.
- 132.7 million S.P. market sales of 91,522 M.T.
    26.2 million S.P. loss[2]
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1.2.2.5 Legumes

Legumes and pulses are another cereal component which provides an important part of the Syrian diet. This group of commodities includes

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[1] The average normal consumption in 1974 may have been due to large purchases of rice to offset an anticipated poor wheat crop following a bad year in 1973.

[2] More recent information put the planned rice subsidy at 114 million S.P.

1000 mt
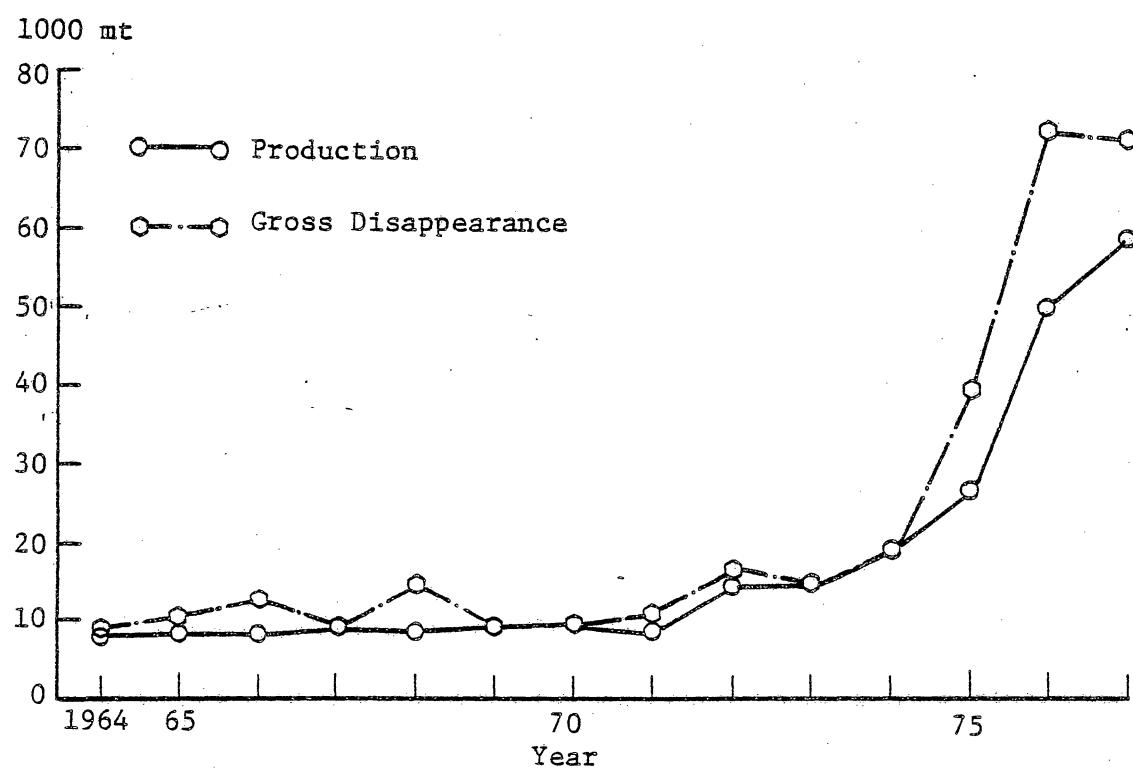
Figure 1.6 Production and gross disappearance of maize, Syria, 1964-77.

Source: Appendix Table A42.
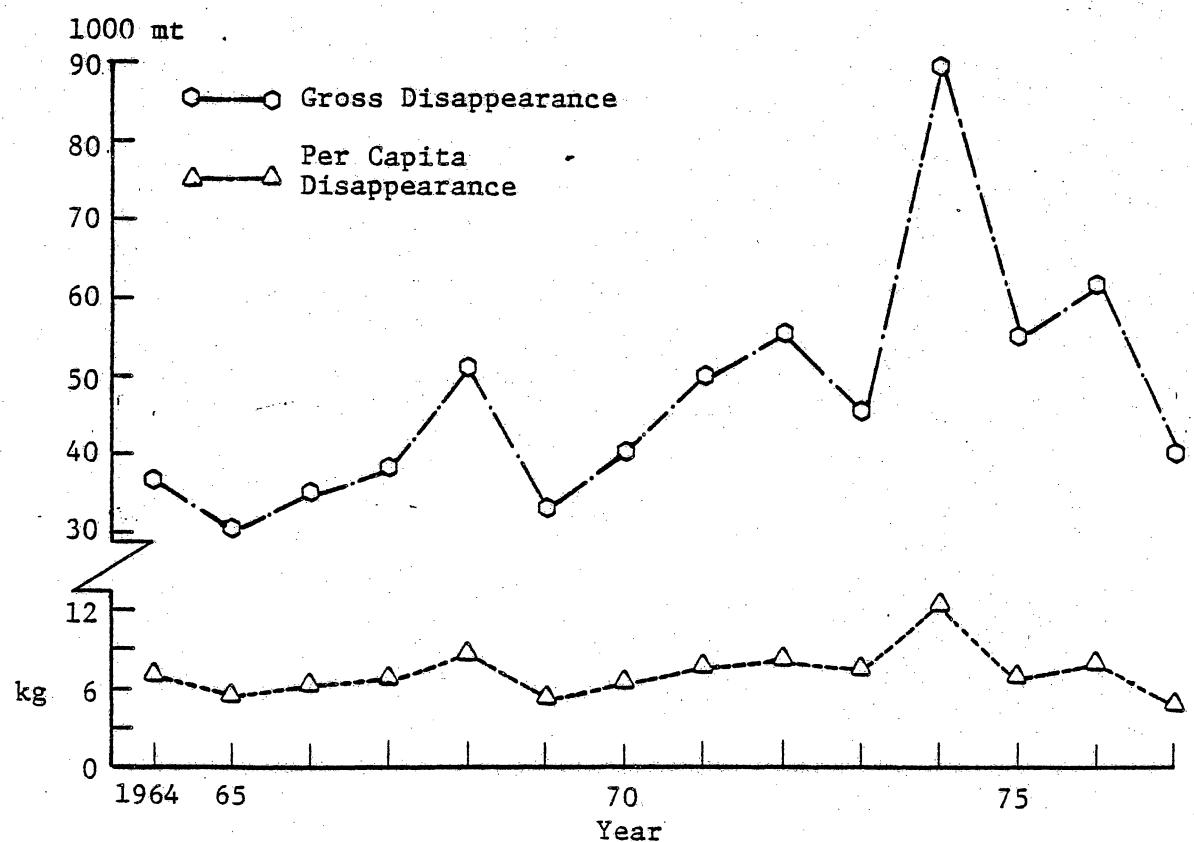
Figure 1.7 Gross and per capita disappearance of rice, Syria, 1964-77.

Source: Appendix Table A40.

Table 1.20

Retail and Wholesale Rice Prices in Syria in Current
Syrian Pounds, 1963 - 1977

| Year | Retail | | Wholesale | |
	Market	Voucher[a]	Market	Voucher
	- - - - - - - - -Piaster/KG - - - - - - - -			
1977	145	80	141	76
1976	145	80	141	76
1975	145	80	141	76
1974	145	80	141	76
1973	145	80	141	76
1972	80	-	76	-
1971	80	-	76	-
1970	90	-	86	-
1969	90	-	86	-
1968	90	-	86	-
1967	89	-	85	-
1966	75	-	71	-
1965	70	-	66	-
1964	70	-	66	-
1963	65	-	61	-

[a]Consumers limited to 750 grams/person/month.

Source: (Central Bureau of Statistics), Statistical
Abstract of Syria, various issues 1965-1977.

lentils, chick peas, dry broad beans, dry haricot beans, dry kidney beans, rambling vetch, flowering sern and bitter vetch. Most of these are for human consumption although the vetches and sern are fed to livestock.

Syria is self-sufficient in the legumes group. Although there is a positive trend in production, year-to-year changes in output are quite substantial (Figure 1.8). These yearly fluctuations are due to weather patterns--almost all production takes place on rain-fed land--and significant increases in government-supported prices beginning in 1975. The price increases are most apparent for lentils; over 50% per annum between 1974 and 1976 resulting in greater planting and production (Appendix Table A1). The trend in exports, of which lentils is the main commodity, has been negative since 1964 (except for 1977 when stocks had to be traded following the good 1976 crop year). This negative trend may be due to an increasing population requiring a greater share of domestic production, or simply disinterest in exploiting the world market. Per capita disappearance follows the production pattern closely--which would indicate few stocks on hand to smooth out annual fluctuations. There is a slight positive trend in per capita consumption.

Lentil prices, a good indicator for all legumes, exhibited very little increase at the wholesale and retail levels until 1973. Price increased 100 percent between 1972-73 due to poor production in both legumes and the closet substitute, wheat. Prices since 1973 have increased, though not so dramatically as in 1972-73 (Table 15-19). Lentils, purchased by the Cereals Bureau like wheat and barley, may also incur subsidies because the differences between farm, wholesale, and retail prices do not appear large enough to cover marketing costs. No estimate of a subsidy is provided here due to lack of marketin cost information for lentils.

1.2.3   Vegetables

Vegetables are second to cereals in the quantity consumed in the Syrian diet in terms of weight. Most vegetables are produced in the summer although there are plans to establish and expand greenhouse facilities for increasing winter vegetable production. In addition most vegetables are produced on irrigated land thus utilizing the better and more valuable agricultural lands. Some winter vegetables are imported, mostly from Jordon.

A review of production trends (Figure 1.9) indicates the vitality of this part of agriculture. Production has more than quadrupled from a low point in 1966 to 2.5 million M.T. in 1977. Per capita disappearance likewise has tripled from a low point in 1966 to 311 kg in 1977. Trade trends indicate that imports have increased in response to consumer demand and similarly exports have decreased. However, Syria is practically self-sufficient in its vegetable needs as imports account for only 3% of production.

Vegetable prices at the consumer level have risen substantially (Table 1.15). In Aleppo, which is closer to the main production areas, prices have increased by 200% over their 1962 levels, a compound rate of 7.9% per annum. In Damascus, prices have increased significantly relative to Aleppo since 1974; reasons for this may include greater consumer demand because of higher incomes and population growth in Damascus. Vegetable prices are not fixed by the central government; rather, maximum wholesale and retail prices reflecting supply and demand are established bi-weekly at the mohafazat
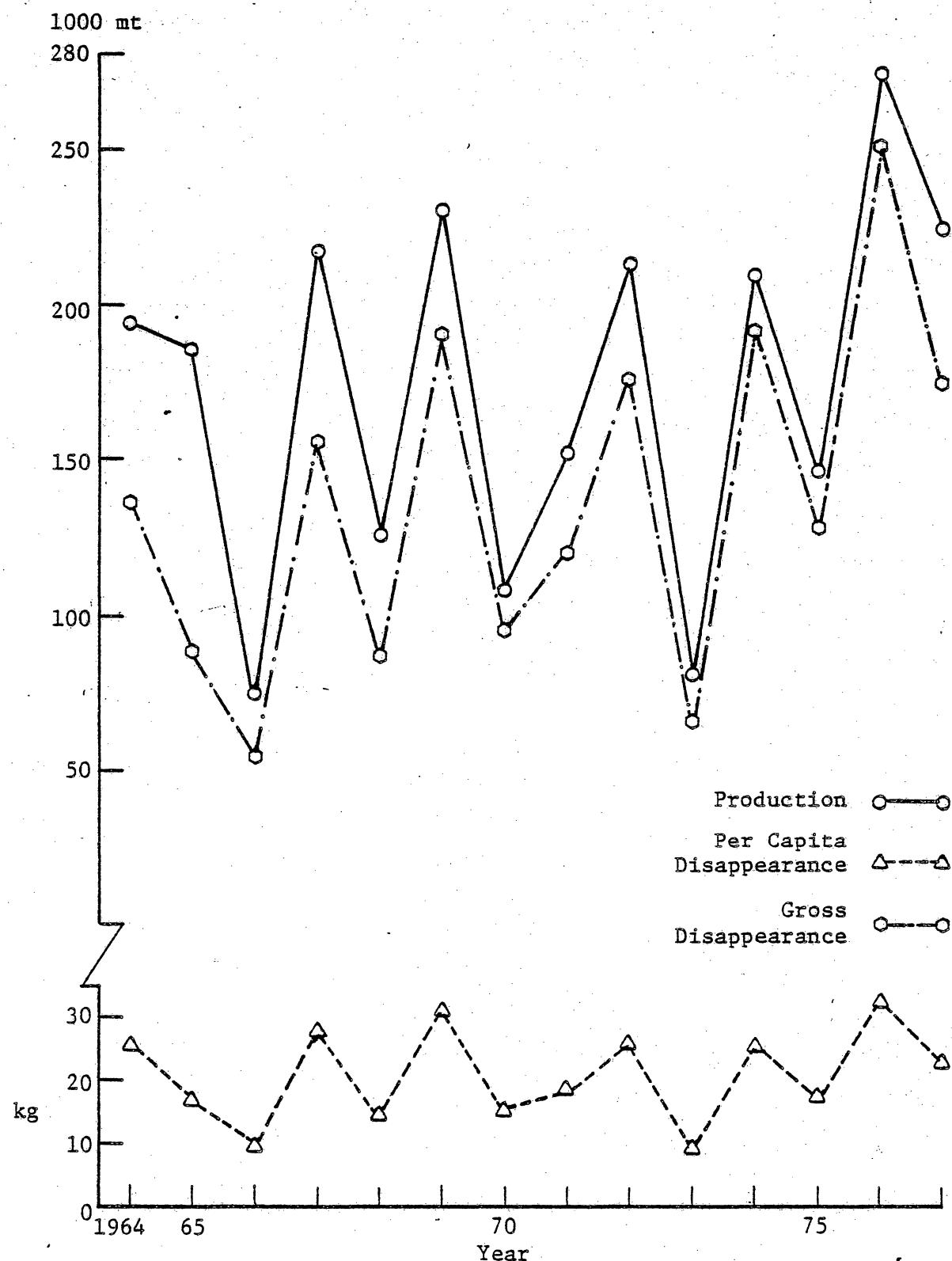
Figure I.8 Production and gross and per capita disappearance of legumes, Syria, 1964-77.

Source: Appendix Table A49.
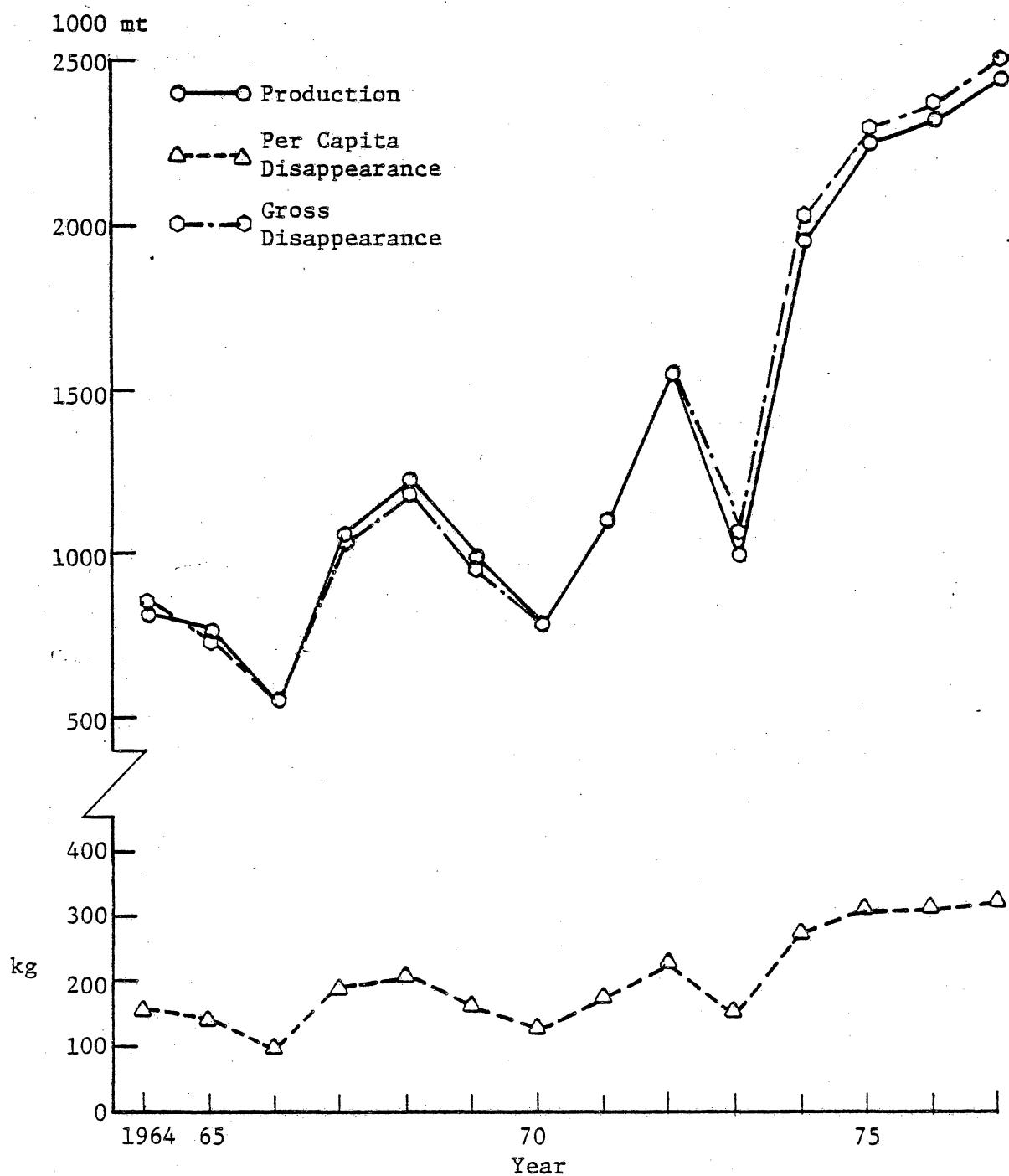
Figure 1.9 Production and gross and per capita disappearance of
vegetables, Syria, 1964-77.

Source: Appendix Table A69.

level by a special committee.[1] Despite the large price increases, one can
infer that this less rigid pricing policy may be adequate because of the
increases in production and consumption.

1.2.3.1 Potatoes

Potatoes are substituted to some extent for cereals, legumes, and
rice in the Syrian diet. Like vegetables in general, the trend in potatoe
production is positive (Figure 1.10). The production level in 1977 was over
three times the level in 1964. Per capita disappearance in 1977 increased
to twice the 1964-66 average level. With increases in domestic production,
Syria is becoming more self-sufficient in its potatoe needs and the trend
in imports has been downward.
Potatoe prices have increased by approximately 200% at the wholesale
and retail levels during the 1969 to 1966 period. Local potatoes generally
are slightly less in price than imported ones (Appendix Tables A4-A7).
Potatoe prices in the mohafazats outside the Damascus and Aleppo areas are
generally lower. Maximum potatoe prices are established bi-weekly at the
mohafazat level as with other vegetables. Again, this pricing method is
more flexible and more compatible with economic forces because producers
are responsding to higher prices and consumers are increasing their consumption
even though two close substitutes, wheat and rice, have had lower prices per
kilo.

1.2.3.2 Tomatoes

Tomatoes rank as the number one vegetable crop in terms of weight
produced and are also the most valuable vegetable crop. Production trends
indicate significant increases during 1964-77, up to three times the 1964-66
level (Figure 1.11). Imports have grown to meet the increased demand, and
exports have been practically zero since 1973. Per capita disappearance
has more than doubled during the 1964 to 1977 period. Although imports
have increased, they are a decreasing proportion of gross disappearance,
indicating Syria is becoming more self-sufficient in tomatoes.
Tomatoe prices, like other vegetable crops, have increased substantially
(Appendix Table A8). Since 1963 price increased two and a half to four times.
Prices have risen faster than both the general Consumer Price Index and
C.P.I. for foodstuffs in Aleppo and Damascus (Table 1.1). Since the middleman
charges a five to seven percent commission and the retail-wholesale price
spread seems reasonable, one can infer that the producers are benefiting from
higher prices.

1.2.3.3 Watermelons

Watermelons are second to tomatoes in terms of weight produced and
the second most valuable vegetable crop. Production trends indicate no
positive trend until the 1973-77 period when hectares planted increased
(Figure 1.12). Since most of this crop is grown on rain-fed land, the

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[1]The committee is made up of one member from the Ministry of Agriculture
and Agrarian Reform, Ministry of Supply and Internal Trade, Peasants, Union,
and executive department in the mohafazat.
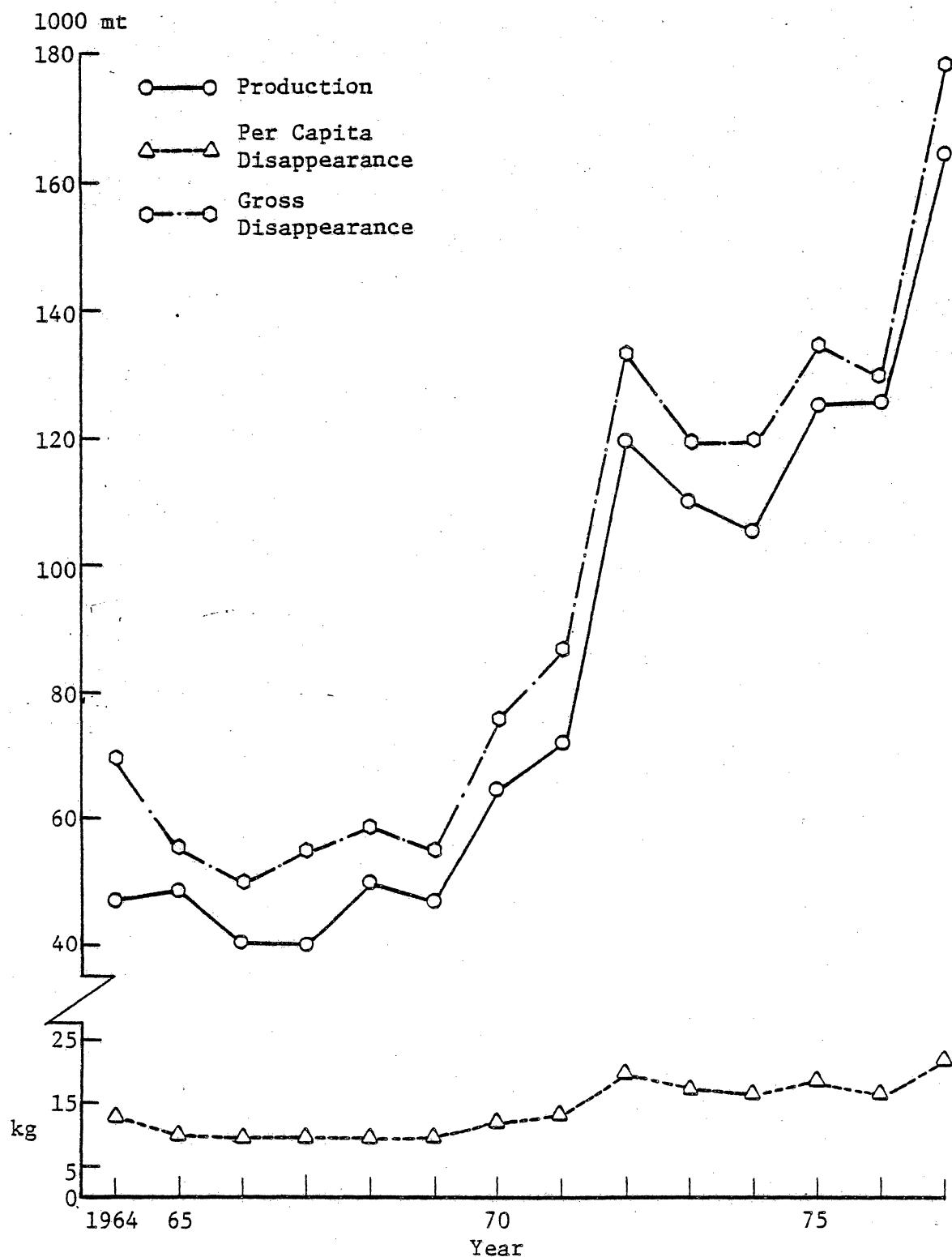
Figure 1.10 Production and gross and per capita disappearance of potatoes, Syria, 1964-77.

Source: Appendix Table A45.
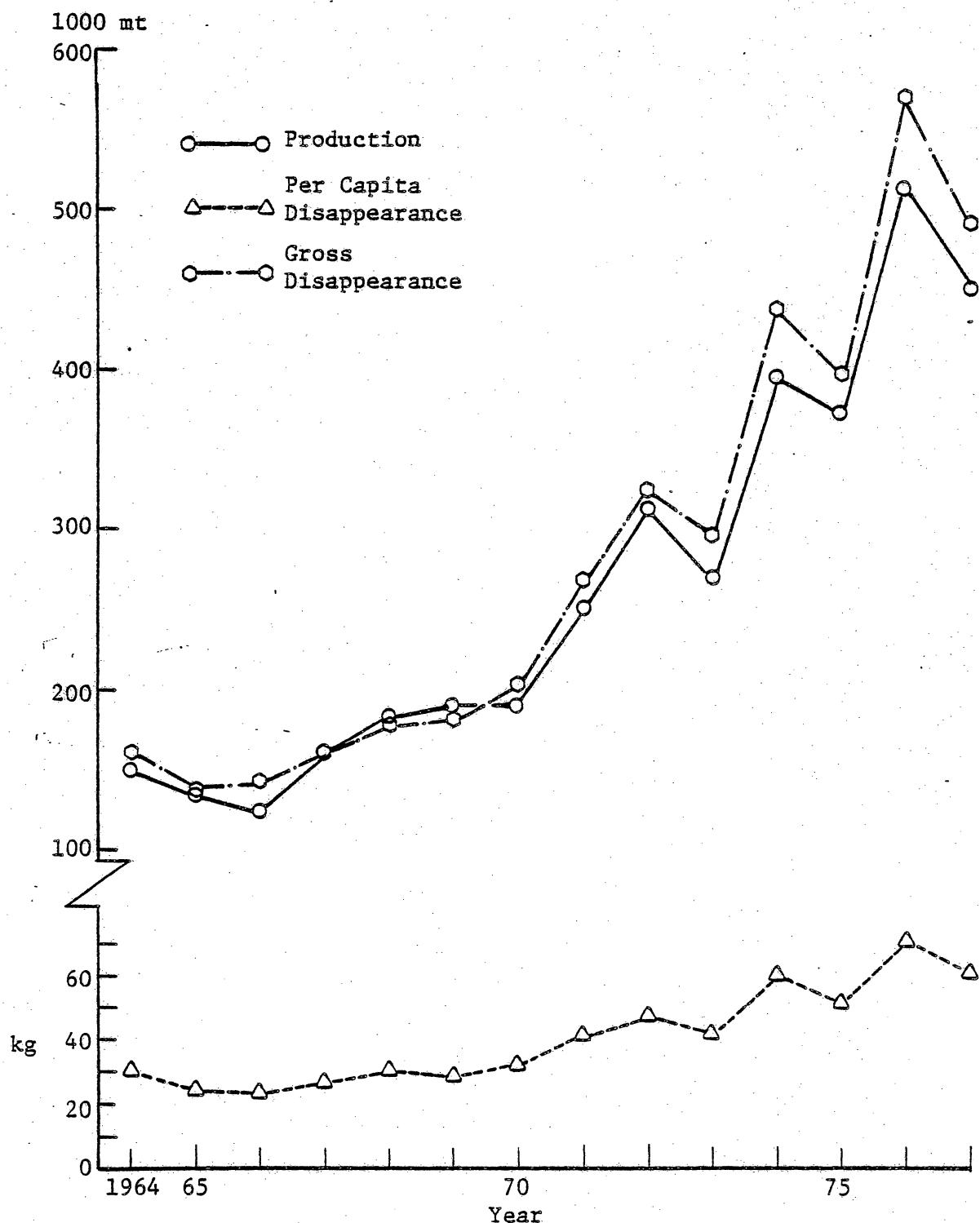
Figure 1.11 Production and gross and per capita disappearance of tomatoes, Syria, 1964-77.

Source: Appendix Table A70.
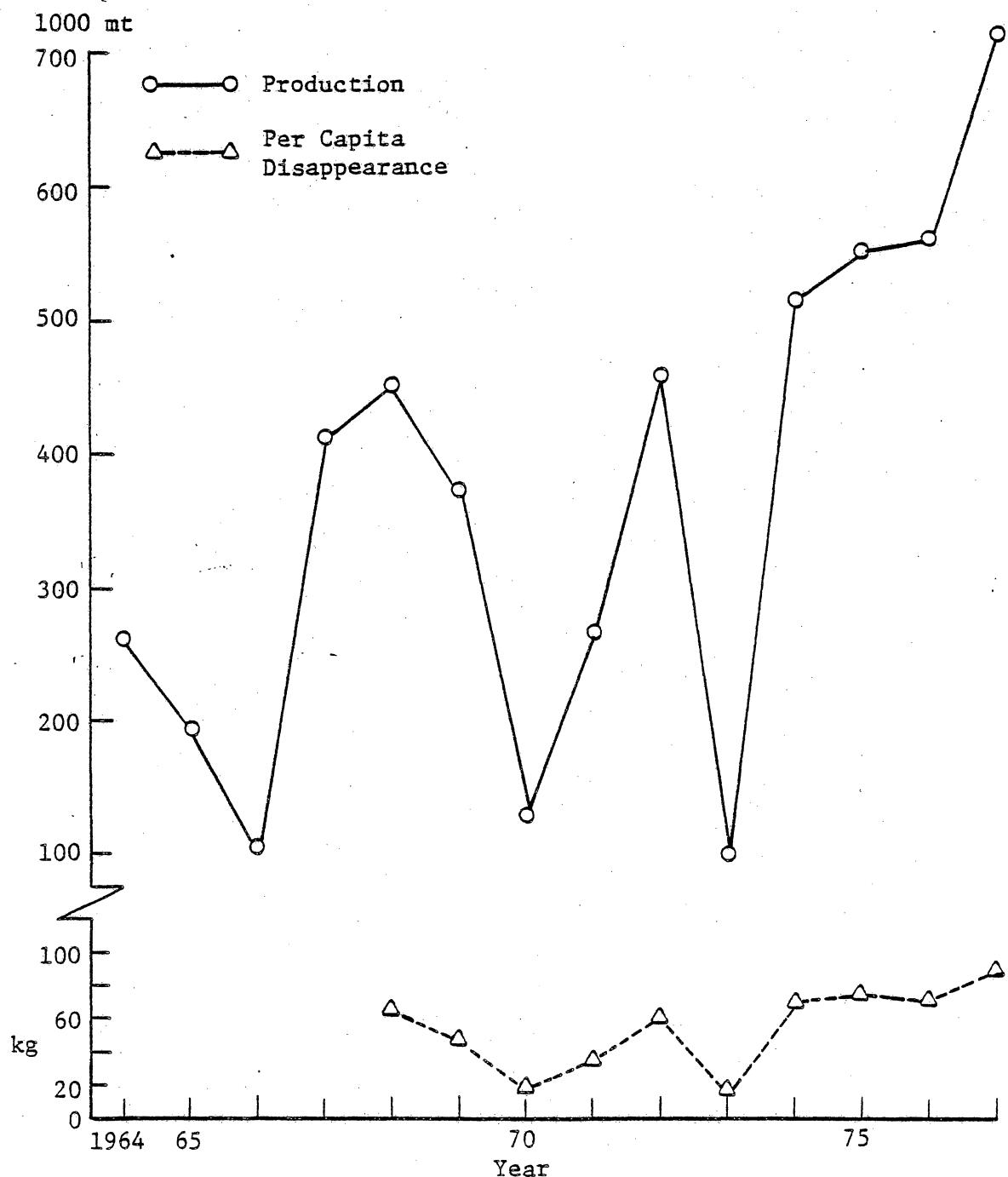
Figure 1.12 Production and per capita disappearance of watermelon,
Syria, 1964-77.

Source: Appendix Table A71.

fluctuations in production represent cyclical weather patterns. Syria
has been self-sufficient in its watermelon needs at least since 1968.
However, to meet the increasing demand, exports have had a decided negative
trend. Per capita disappearance has followed the production cycle with a
positive trend since 1973.

Watermelon prices (Appendix Tables A9-A10) have doubled at the retail
level since 1968-69. Retail and wholesale prices in the mohafazats have
generally been lower than in Damascus and Aleppo; instances of higher prices
may be due to market imperfections or abnormal supply-demand relationships.

1.2.3.4   Other Crops

Other vegetable crops of lesser importance include dry onions, cucumbers,
and squash. Production of these crops has been increasing similar to
vegetables in general. Imports come from Jordan during the winter season.
Prices for these crops have been following the trend for other vegetables,
with prices doubling or tripling since 1969-70 (Appendix Table A11-A15).
Lower prices in the mohafazats outside of Damascus and Aleppo reinforce
previous observations and would be consistent with market forces and equity
goals.

1.2.4   Fruits and Nuts

Fruits and nuts rank third in weight contribution to the Syrian
diet. About one-third of all fruit and nut production is now irrigated.
Important commodities to be discussed below include olives, grapes, apricots,
apples, and peanuts.

Production trends are illustrated in Figure 1.13. Until the 1973-77
period there was no discernible trend in production. As a result, per
capita disappearance declined from a high in 1964 to around 80 kg per person
per year by increasing imports of some items as indicated in Appendix
Table A62. Exports of other items have declined markedly to fulfill domestic
demands. Until new acreage is brought into production through the Euphrates
project, Syria must import approximately one-fourth of its fruits and nuts.

As a result of increasing consumer demand, and inadequate domestic
production increases in prices for fruits and nuts have led all other
commodities at the retail level (Table 1.15). In contrast, at the wholesale
level, prices increased at the lowest rate among all commodity groups (Table 1.2).
This situation may raise questions about the efficiency of the marketing
system between the wholesale and retail levels. Further, slowly increasing
farm prices may inhibit new fruit and nut development, as an adequate return
on investment for tree crops takes several years. Inflationary pressures
on retail fruit and nut prices have been particularly high since 1973.

1.2.4.1 Olives

Olives rank as the number two fruit crop in weight, second only to
grapes. Most of the crop is used for oil production although a significant
amount is sold for fresh consumption. A review of consumption and production
trends reveals very wide annual fluctuations, a common phenomenon with olive
production, around an upward trend, Figures 1.14 and 1.15. Most olive trees
are rain-fed. There is little or no external trade in fresh olives, suggesting
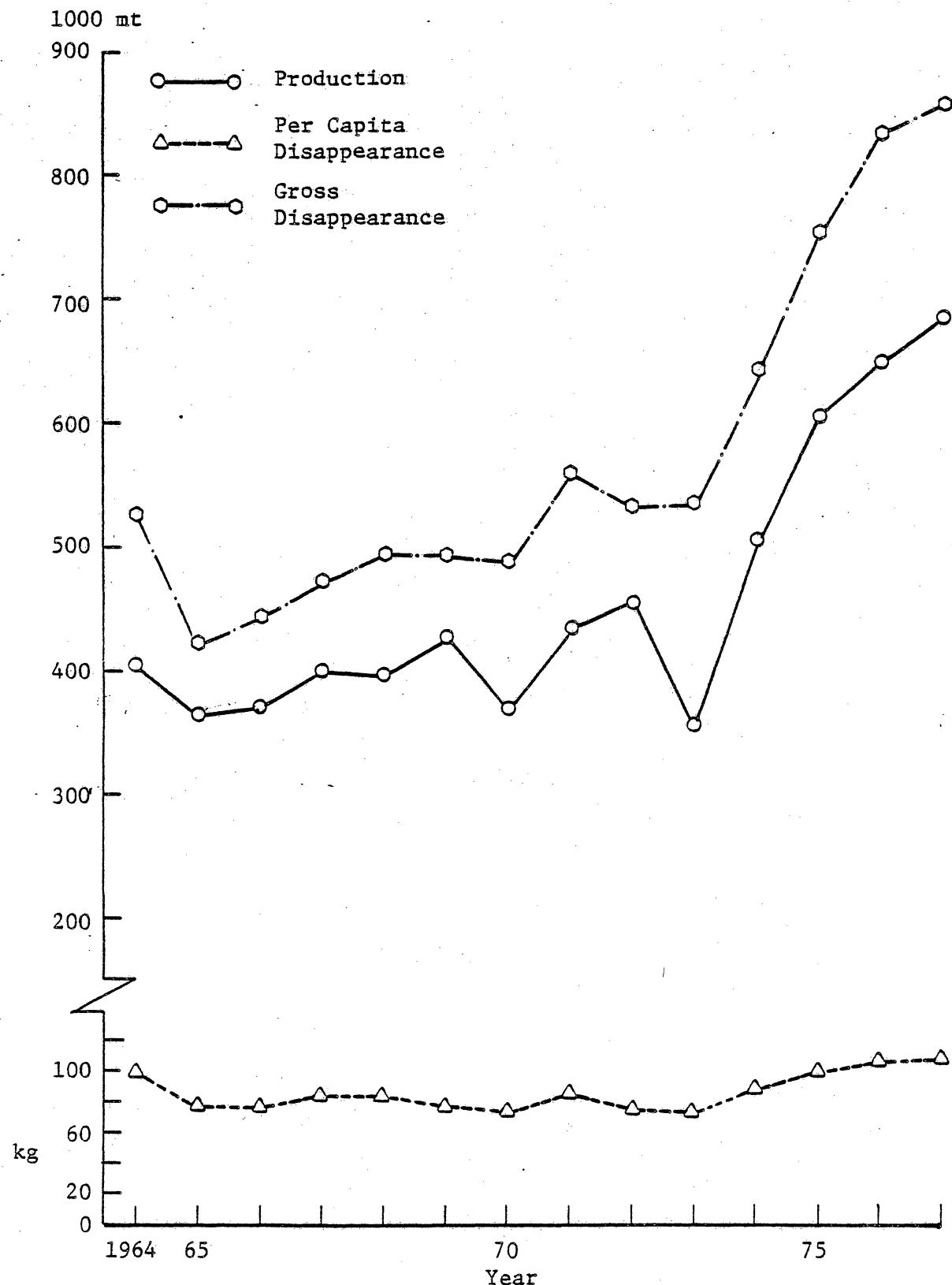
Figure 1.13 Production and gross and per capita disappearance of
fruits and nuts, Syria, 1964-77.

Source: Appendix Table A62.
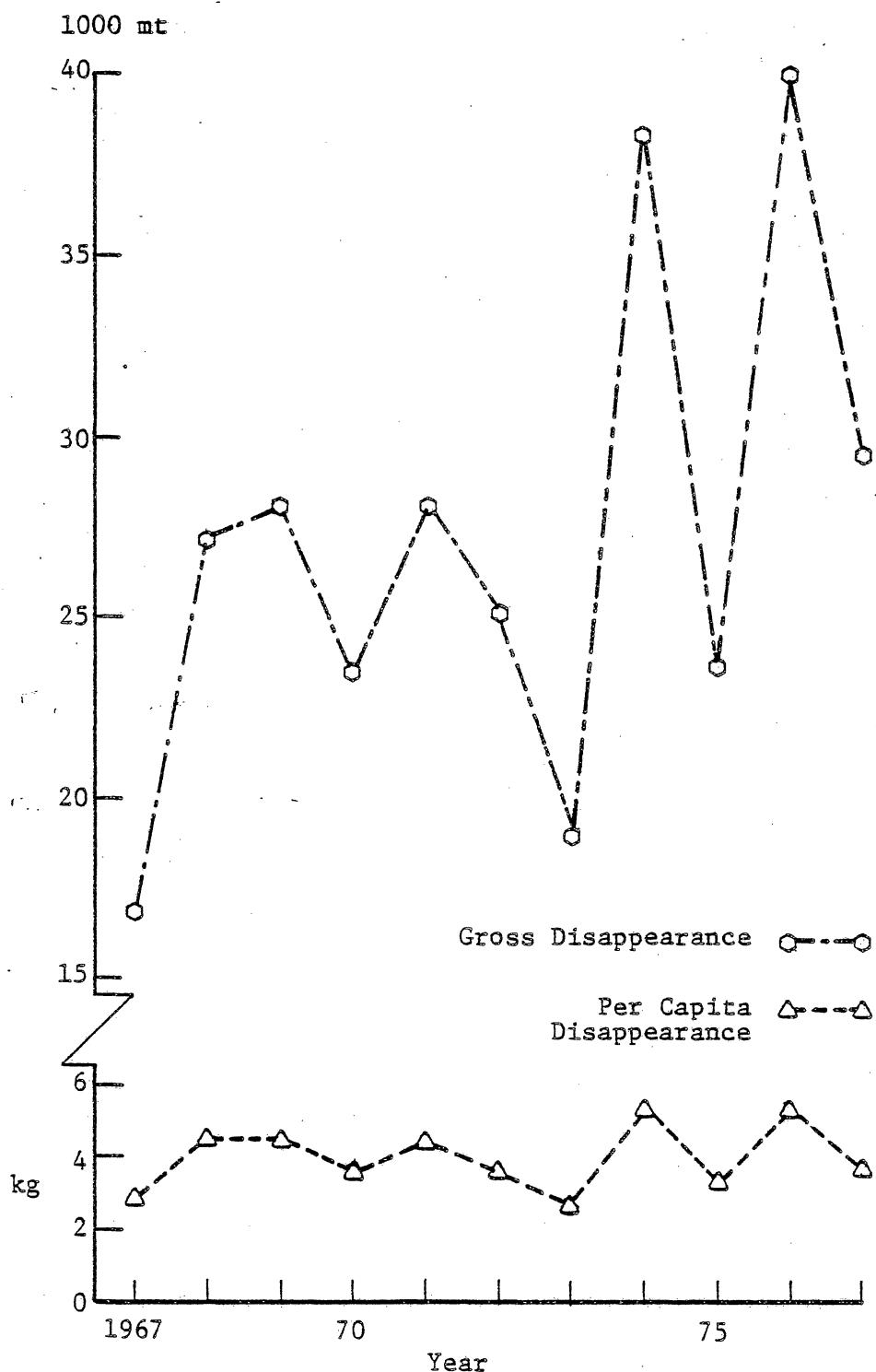
Figure 1.14 Gross and per capita disappearance of
fresh olives, Syria, 1967-77.

Source: Appendix Table A64.
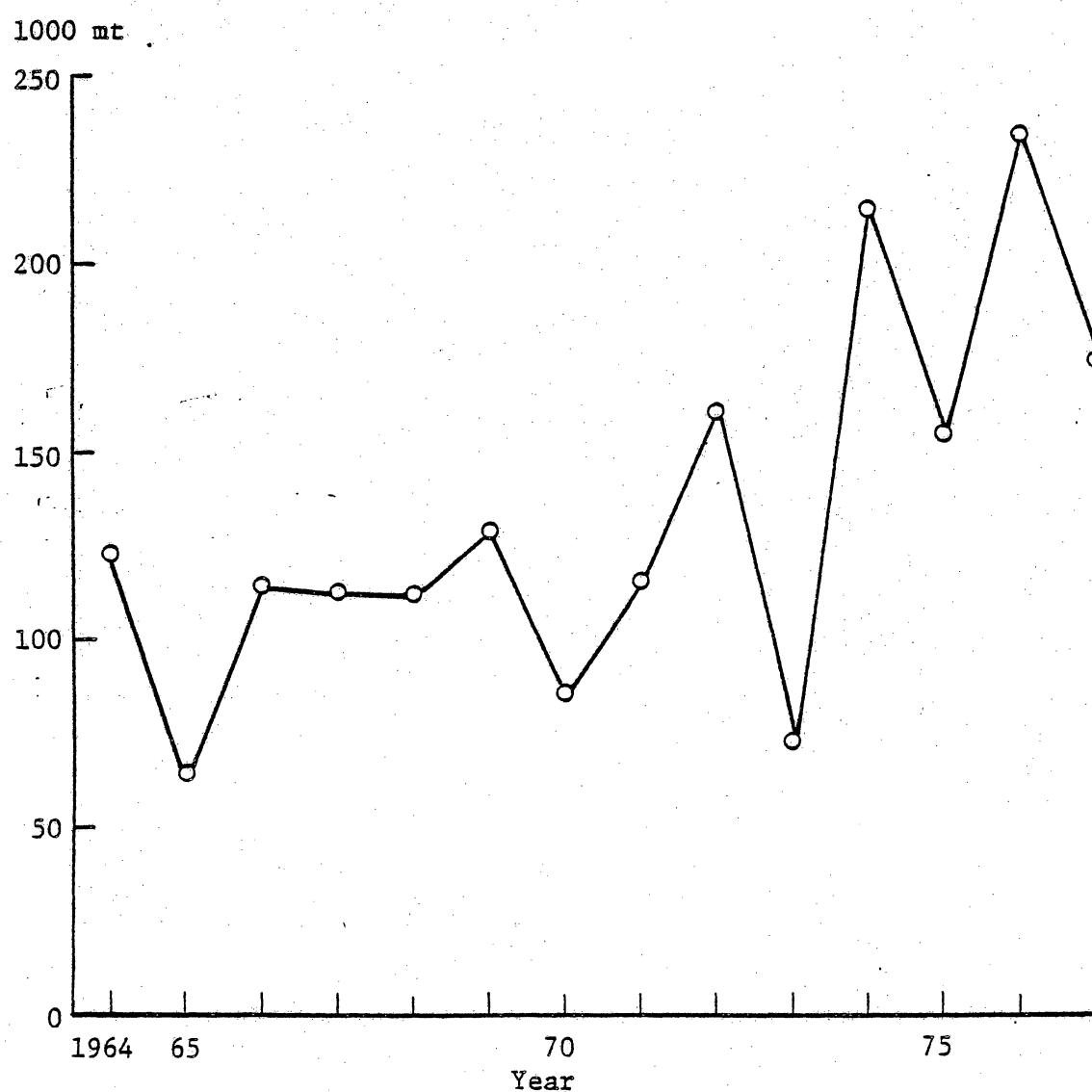
Figure 1.15 Total olive production, Syria, 1964-77.

Source: Appendix Table A64.

that Syria is self-sufficient. Per capita consumption has followed production with an upward trend since 1973. Fresh olive prices, like fruit and nut prices in general, have doubled during 1970-77.

1.2.4.2 Grapes

The fruit crop with the largest volume of annual production is grapes. Utilization includes fresh consumption, raisins, and wines. Most grapes are consumed fresh. Until 1972 there was no discernible trend in production (Figure 1.16). Since 1972, when wholesale and retail prices began increasing dramatically, hectares under production increased 40% during 1972 to 1976, mainly in irrigated areas. Consequently, there was a substantial upward trend in production (66% increase) during 1973 to 1977. Exports of fresh grapes have fallen to zero in order to satisfy domestic demand. With no reported imports, Syria appears self-sufficient in fresh grapes.

Prices of fresh grapes have increased substantially since 1970 at the wholesale and retail levels (Appendix Tables A16-A17). As with vegetable prices, grape prices vary bi-weekly as supply and demand conditions warrant. Since the margin between wholesale and retail prices has remained small since 1970, one can infer that the benefits of higher prices have gone to producers. Thus, this pricing program seems satisfactory since producers have responded to higher prices by producing more and consumers, with higher incomes, have chosen to consume more grapes. As with vegetables, grape prices in the mohafazats outside of Damascus and Aleppo are lower.

1.2.4.3 Apples

Apple production tripled during the 1965-1976 period. Per capita consumption in 1976 was almost twice the 1966 level (Figure 1.17). Despite increased production Syria is not self-sufficient in apples and strong consumer demand has resulted in sizable imports. During 1976-77 imports accounted for 24% of total supplies.

Wholesale and retail apple prices approximatly doubled during 1970 to 1975 (Appendix Tables A18-A19). However, as with vegetable and other fruit prices, one may infer that this situation is acceptable because of producer and consumer responses. Again, prices at the other mohafazats are lower presumably because incomes are lower and direct home consumption is higher in production areas.

1.2.4.4 Apricots

The apricot crop is fourth highest in tons of fresh fruit harvested in Syria. Besides its use in fresh consumption, apricot utilization also includes marmalade and dried products. Production trends indicate large increases in output (Figure 1.18). Almost all the increase in area farmed since 1967 has been irrigated, thus accounting for the 150 percent increase in 1975-77 production above the 1964-67 level. Trade in apricots is small, making Syria generally self-sufficient in this crop. Per capita disappearance has risen by over 300% during the 1965 to 1975 period.

· Apricot prices tripled during 1971-77 in Damascus and Aleppo (Appendix Table A20). Since the difference between retail and wholesale prices has remained relatively the same, most price increases have accrued to producers which may explain the increase in production. Lower prices in other mohafazats are consistent with earlier observations.
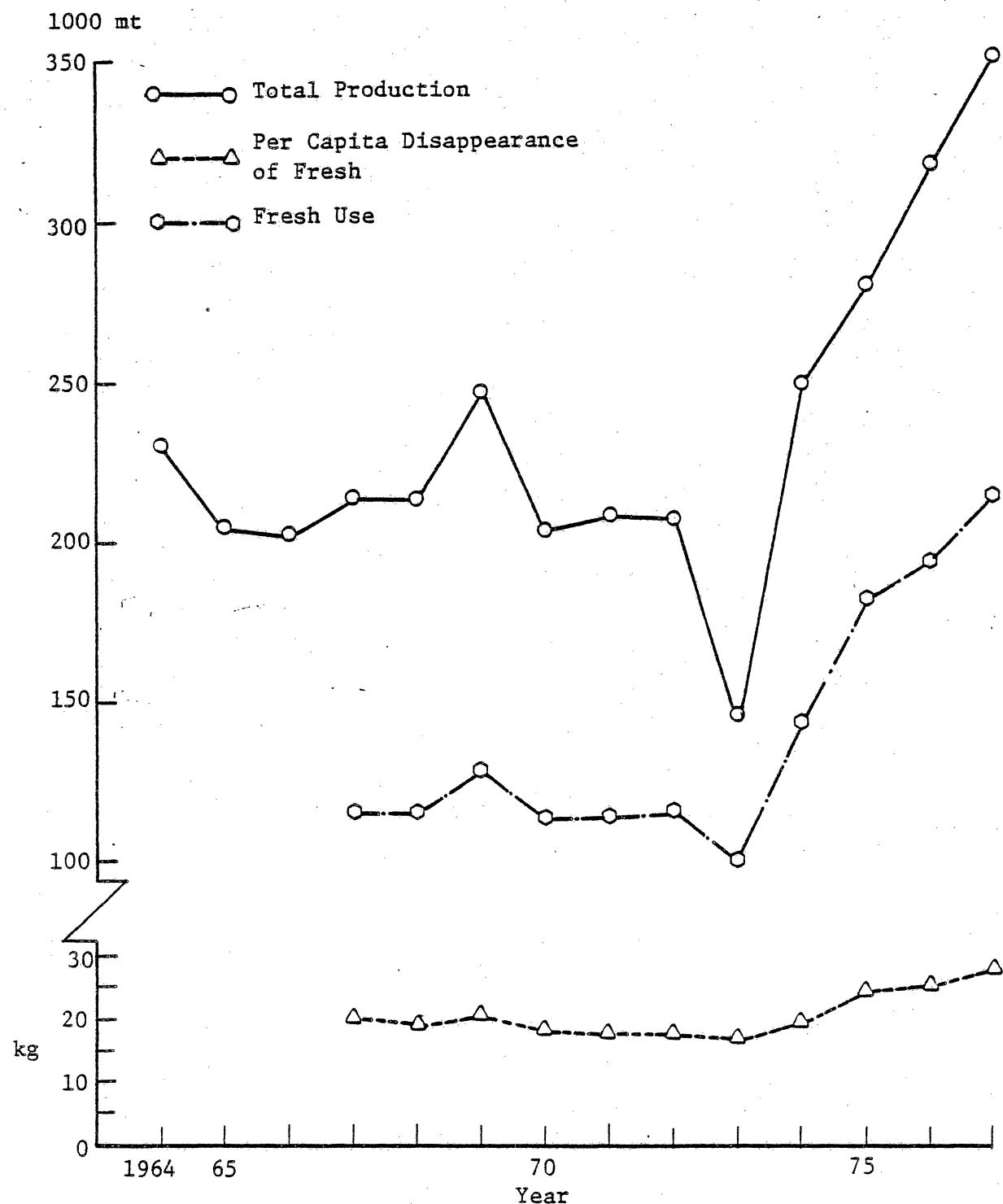
Figure 1.16 Total production and per capita disappearance of fresh grapes, Syria, 1964-77.

Source: Appendix Table A66.
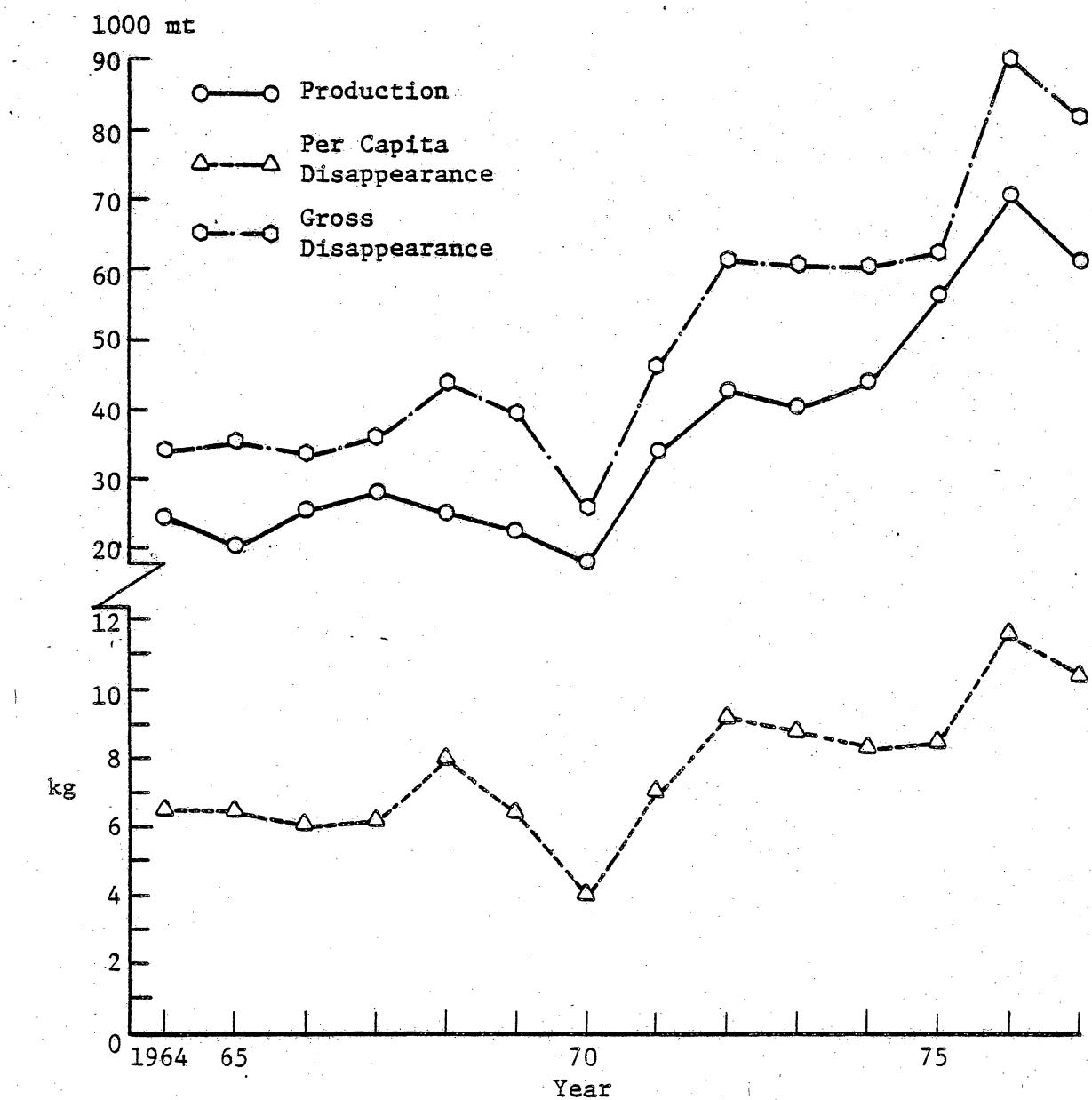
Figure 1.17 Production and gross and per capita disappearance of apples, Syria, 1964-77.

Source: Appendix Table A68.
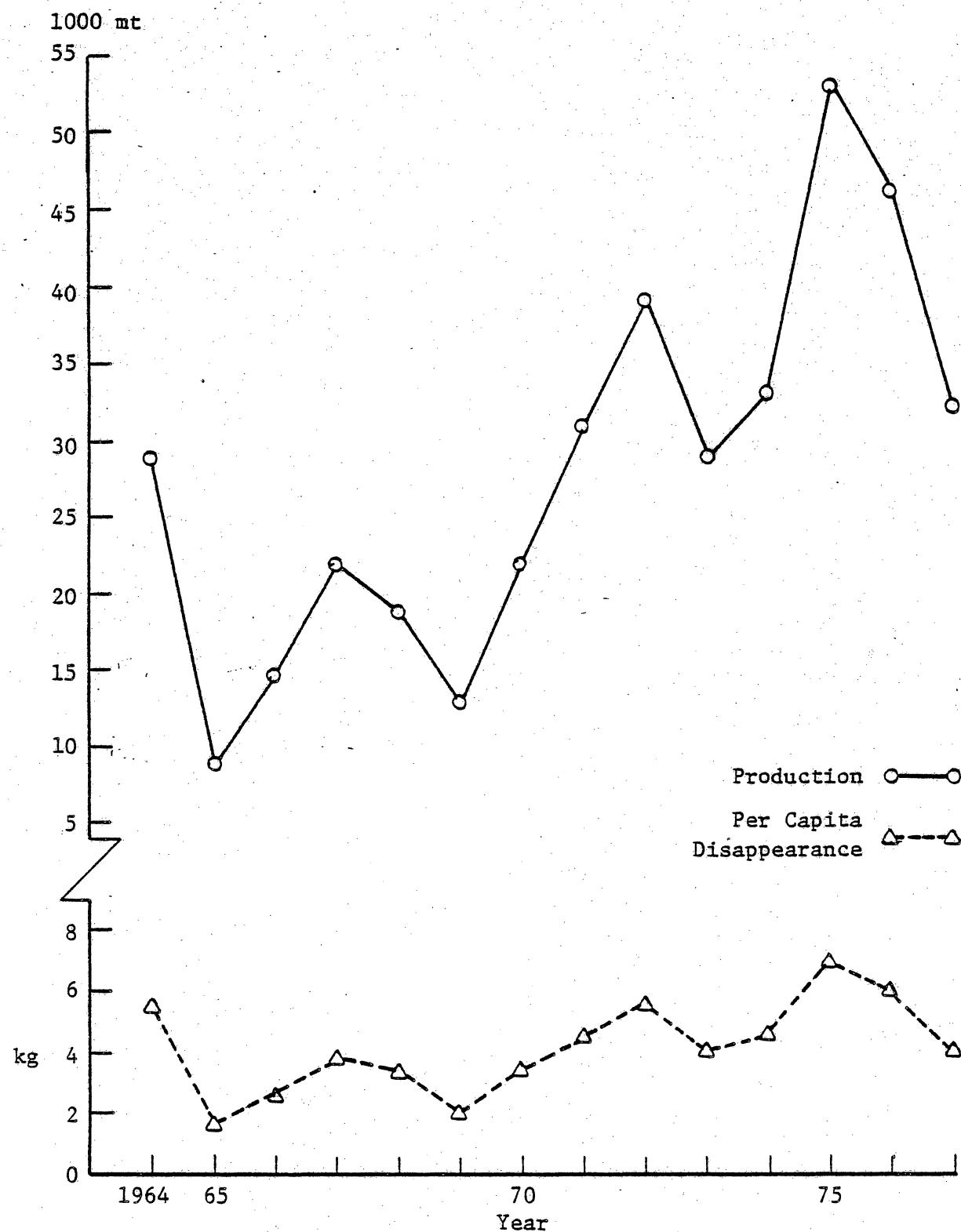
Figure 1.18 Production and per capita disappearance of apricots, Syria, 1964-77.

Source: Appendix Table A67.

1.2.4.5 Peanuts

Usually considered an industrial crop, peanuts are primarily consumed as nuts in Syria. Except for shelling peanuts for the export market, there is very little processing. Production increased almost two and one-half times during 1964-1976 (Figure 1.19). The increases in production have out-paced population growth, thus per capita disappearance has more than doubled since 1964. Trade is important for this crop as exports range from 25-50% of production. Thus, peanuts fulfill the self-sufficiency goal and aid in the balance of trade. Peanut prices at the farm level have been set by the central government since 1973. Farm prices since 1973 have more than doubled (Table 1.14). Most peanuts are marketed by the private sector which apparently out bids the government for the crop.

1.2.4.6 Other Crops

Other fruit and nut crops of importance include citrus, bananas, figs, and pistachio. Syria is particularly deficient in citrus production, especially oranges (see _Statistical Abstract_). In order to satisfy domestic demand, 70-80% of the commodity is imported.[1] Orange retail price in Damascus rose 77 percent from 1970 to 1975 (Appendix Table A21).

All bananas are imported from either Central or South America. The prices of these items have increased less rapidly than those of other commodities (Appendix Tables A21-A24). Their prices are generally higher in the mohafazats outside of Damascus and Aleppo, probably reflecting transportation and other marketing costs. Figs and pistachio are two valuable crops with some exports so that the self-sufficiency goal is met.

1.2.5 Livestock, Poultry, and Products

The total value of animal production is approximately one-third that of plant production is (_Statistical Abstract_). Livestock and poultry production follow cereals and industrial crops in value of production (_Statistical Abstract_, 1978). In general, the level of total animal production has been increasing, particularly since 1972. On a per capita basi, however, performance in 1976 had almost reached the 1964-66 level after experiencing a sharp decline in the interim (Table 1.6, Figure 1.3). It could be said that Syria is self-sufficient regarding its animal product needs but policies restricting importation of feed grains, reliance on domestic feed grains, and constant pasture conditions result in slow growth. Trade in live animals, mean and meat products has been relatively low. Substantial imports occurred in the first half of 1979 but data are not available. However, dairy and egg imports are an exception as their value ranked number three in 1977 (Table 1.8).

Wholesale prices for animals and animal products have increased the fastest of all the commodity groups (Table 1.2). Retail price increases equalled those of fruits and vegetables (Table 1.15). Meat products have led price increases at the wholesale and retail levels while milk and dairy products have been relatively more moderate at the retail level. The price increases—over 300 percent and 200 percent since 1962 at the retail and

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[1]There is a state plan to increase fruit production, citrus included, in the northeast area through use of economic incentives for orchard development and improvement.

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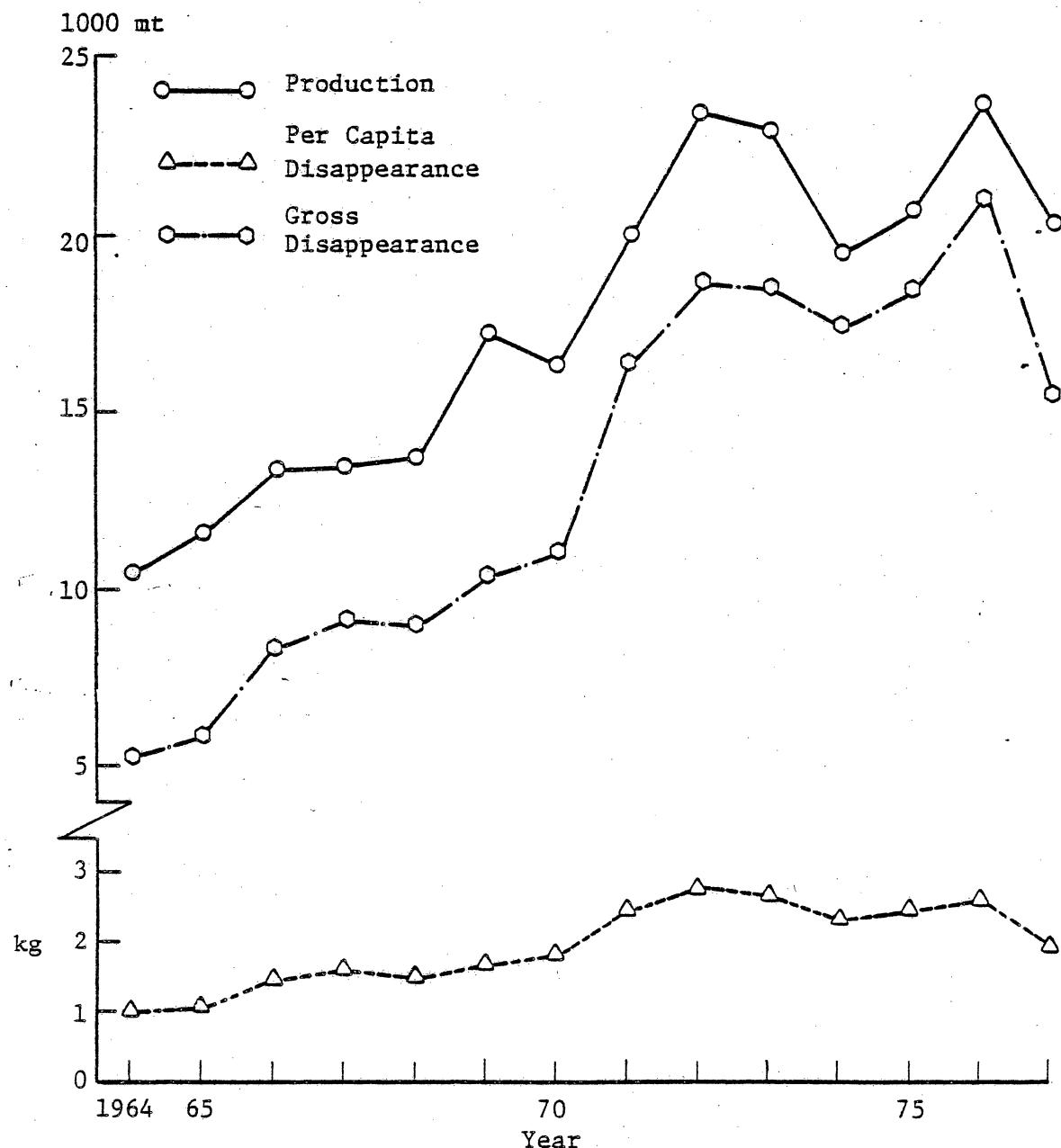
Figure 1.19 Production and gross and per capita
disappearance of peanuts (in shell), Syria, 1964-77.

Source: Appendix Table A44.

wholesale levels, respectively--have been caused by higher incomes and population pressures in Syria bearing down on a slowly-growing livestock sector. In a rough comparison, these products experienced price increases 50 percent above those in the United States over the same period. Retail meat prices in Syria more than doubled from 1973 to 1977 while U.S. retail prices increased less than 5 percent. To provide more detail, major commodities within the livestock, poultry, and products subsection are discussed below.

1.2.5.1 Meat

Total meat production, which includes sheep and lamb, goats, cattle, camels, and chickens, has been very erratic (Figure 1.20). Since 1974 there has been an upward trend in production, but whether this can continue, in light of past performance, remains to be seen. Per capita disappearance also exhibits an upward trend since 1974, but until that time no trend was apparent. As mentioned, trade in meat, dairy, and egg products (Appendix Tables A50-A57) has been small compared to domestic production (3-4 percent at the most), and there are export restrictions on meat products and live animals.

Beef production in 1975-77 had increased 74 percent over its 1966-68 level; poultry production had nearly tripled during the 1967 to 1977 period; but mutton and lamb meat--65% of total meat production--show no trend in production (Appendix Tables A52-A54).

Since 1967 the General Consumption Institute has been the only official wholesaler of meat in Damascus and prices have been regulated. Meat prices outside of Damascus are relatively uncontrolled. Despite greater increases in meat, fish, and egg prices in Aleppo compared with Damascus (Table 1.15), the retail market price levels for sheep meat, cow meat, calf meat, and live poultry were lower in Aleppo during 1963-77 (Appendix Tables A25-A28). The General Consumption Institute, which has incurred large annual losses on its meat operation with regulated prices in Damascus, has attempted to minimize losses by operating at less than full capacity and importing meat which tended to dampen producer prices. These losses are "subsidized" by other more profitable activities of the GCI. Estimates of these losses, according to the General Consumption Institute, were 22 million L.S. in 1977 and a preliminary estimate of 20 million L.S. in 1978.

1.2.5.2 Dairy and Eggs

Production trends of both dairy and eggs have been increasing (Figures 1.21-1.22). Dairy production, after a definite negative trend during 1964-73, has increased by 70 percent from 1973 to 1977. Egg production has been increasing steadily since 1964 and since that time has more than doubled output. The increases in poultry, eggs, and dairy production since 1973 may be partly due to increases in maize and barley production since 1973 (cf. Figures 1.5-1.6) but were largely made possible by the recent development of facilities to import feed grains, process, and distribute mixed feeds. Per capita disappearance of dairy products has closely paralled total production: the downward trend during 1964-73 is being reversed. Per capita egg disappearance has had a positive trend during the entire 1964-77 period.

Figure 1.20 Total and per capita meat disappearance, Syria, 1964-77.

Source: Appendix Table A57.
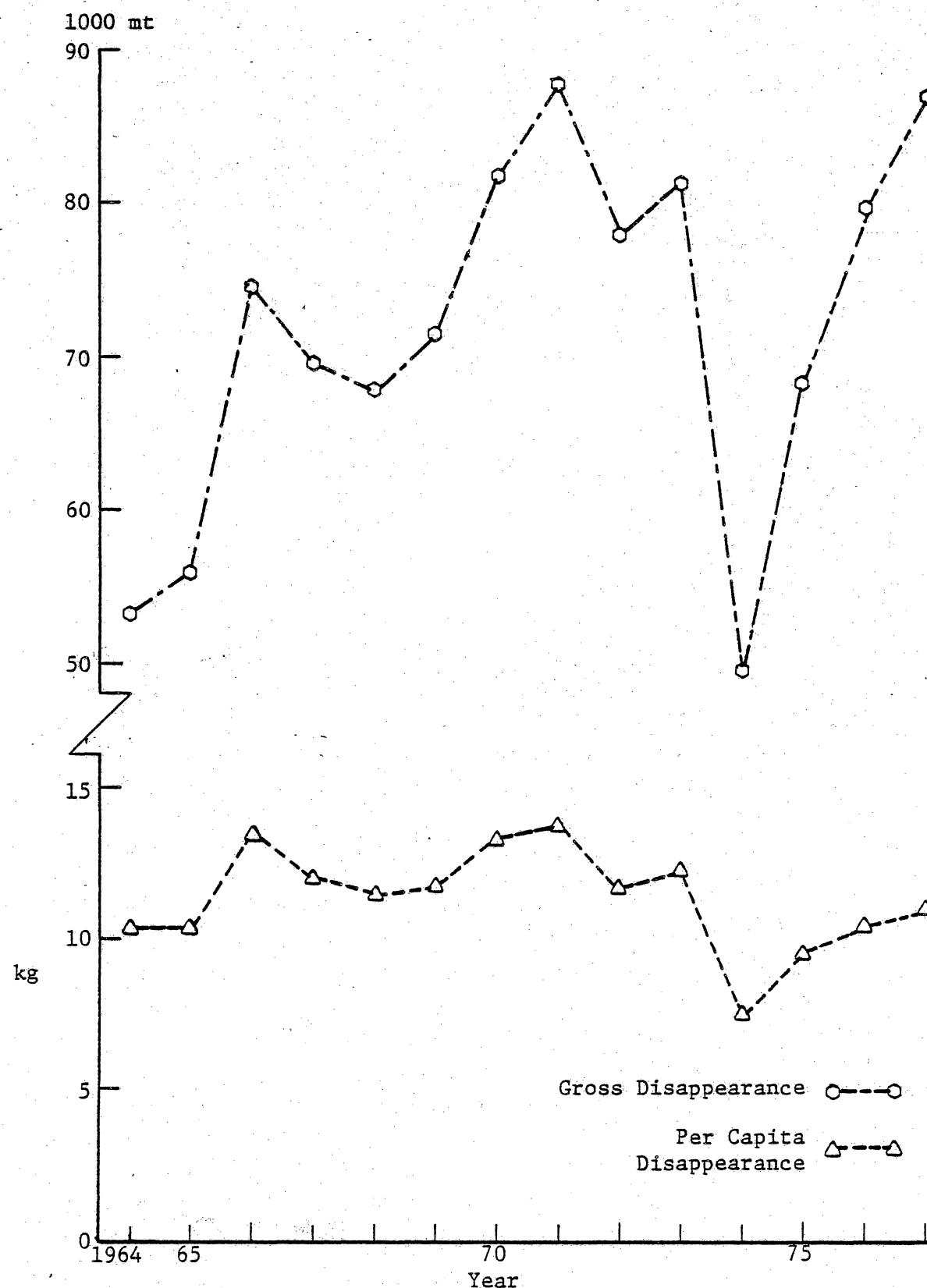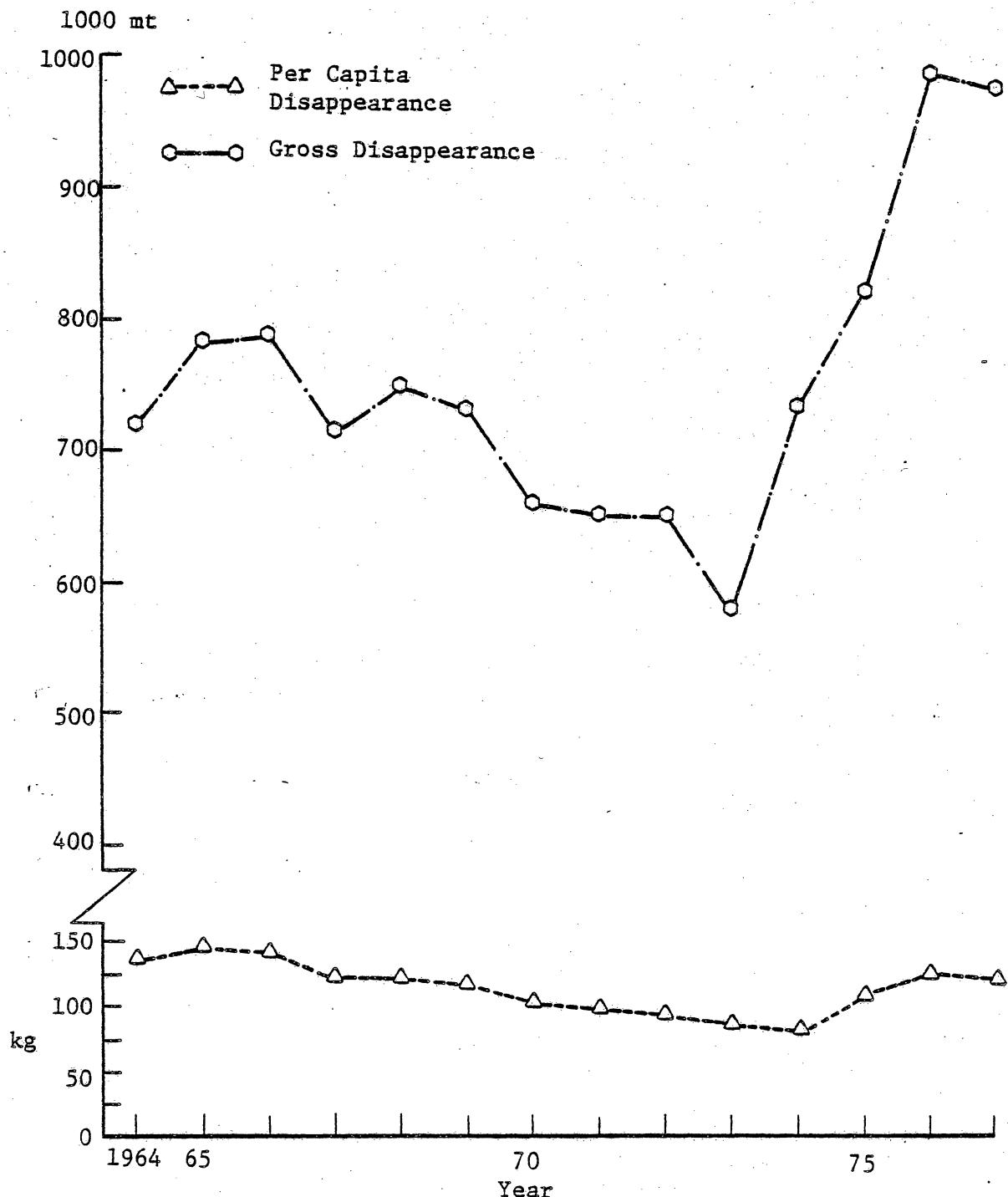
Figure 1.21 Gross and per capita disappearance of dairy products, Syria, 1964-77.

Source: Appendix Table A50.

1000 mt
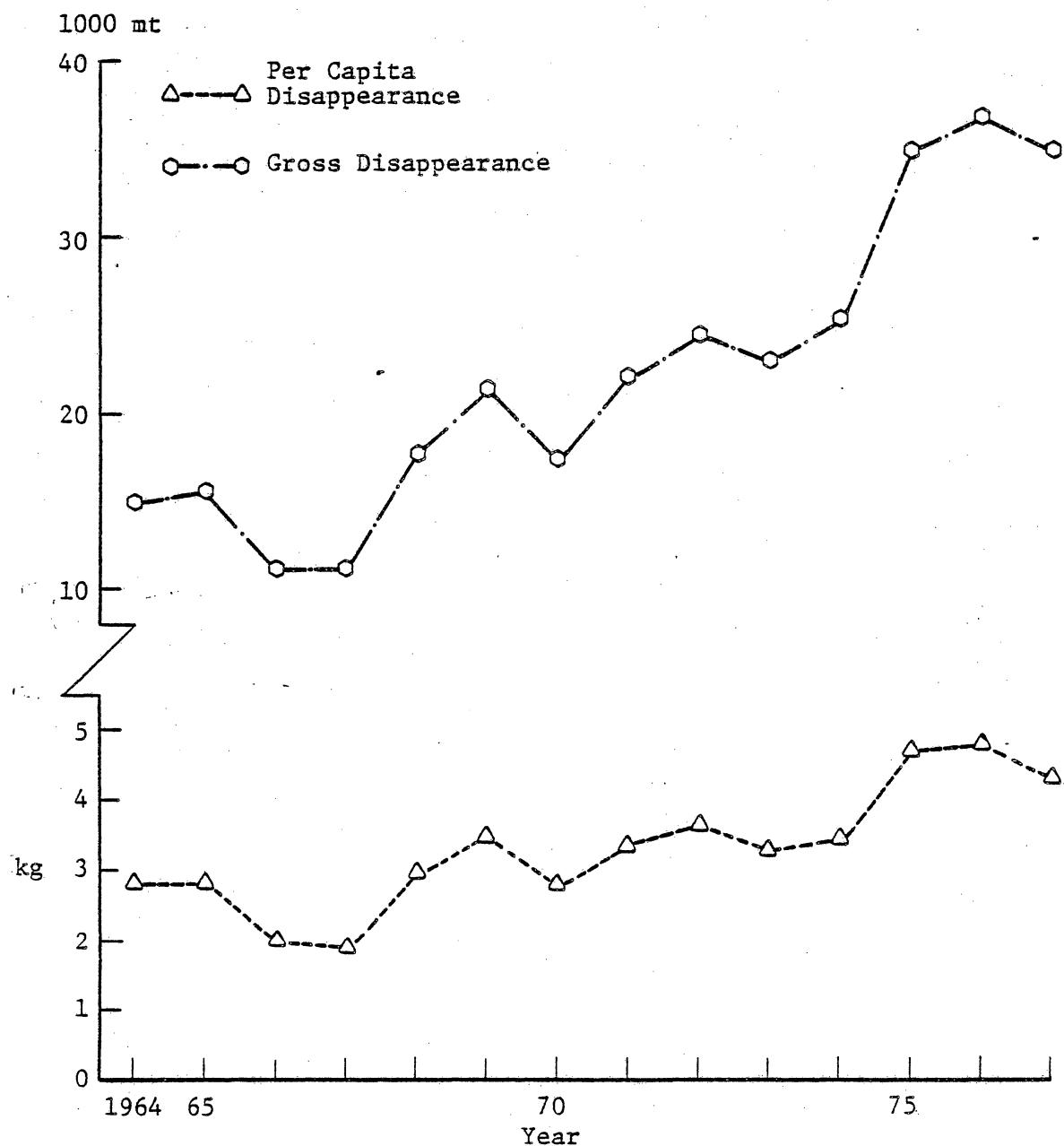
Figure 1.22 Gross and per capita disappearance of eggs, Syria, 1964-77.

Source: Appendix Table A51.

The value of trade in dairy products and eggs has been substantial, but Syria appears generally self-sufficient for both commodities (Appendix Tables A50-A51).

Dairy and egg prices are relatively flexible. Inflationary pressures have caused prices to more than double at the wholesale and retail levels during 1970-77. Aleppo dairy prices were consistently higher than those in Damascus during this period. Dairy and egg prices in mohafazats outside these two cities were generally lower, reconfirming earlier observations (Appendix Tables A29-A35). The efficiacy of price policy here seems adequate, especially for eggs, where one can draw parallels with vegetables and fruits. One should recognize, however, the close relationship between livestock, poultry, dairy, and egg production with policies affecting feed grain imports and production and pasture improvement.

1.2.5.3 Wool and Leather

Other products from livestock are wool and leather. There has been no discernible trend in either wool or leather production (Appendix Tables A58-A60). In fact, to satisfy growing consumer demand for both products, imports have been increasing while exports have remained relatively constant. As with dairy and eggs, one should recognize the relationship between these products and policies which affect livestock numbers and production.

1.2.6 Industrial Crops

As a group, industrial crops have usually ranked as the second most valuable behind cereals (Statistical Abstract, 1978) There are an important group of commodities providing employment and helping the balance of trade. The industrial crops to be discussed here include cotton (for lint and vegetable oil), olive oil, sugar, and tobacco. Cotton and tobacco are the main cash crops. Among these crops, tobacco production is increasing the most rapidly; sugar imports require the most foreign exchange; and cotton earns the most in foreign exchange. Syria is self-sufficient in all of these crops except sugar. Although it is the government's intention to encourage sugar production, very little or no progress has been made.

1.2.6.1 Cotton Lint

Cotton holds an important place in Syrian agriculture. Farmed for centuries, it is renowned throughout the world for its quality. Through the use of modern methods, fertilizer, and pesticides, cotton yields increased over 40% during 1967 to 1977. This has enabled the harvest of the same amount of cotton from less land, as government policy has brought sugar beets into production at the expense of cotton and, to some extent, Mexican wheat (Appendix Table A2). Thus, cotton production has been relatively stable since 1968 even with declining area (Figure 1.23). Exports which account for three-fourths of the crop have generally followed the production pattern and have no discernible trend. During 1973-75 when the world cotton market enjoyed prices two to three times above average, Syrian exports actually declined.

Until 1972, annual seed cotton prices were very stable. Seed cotton prices at farm level have increased substantially since 1972; 14 percent per annum through 1978 (Table 1.14). Seed cotton prices increased 117 percent since 1972 but the general Consumer and Wholesale Price Indices
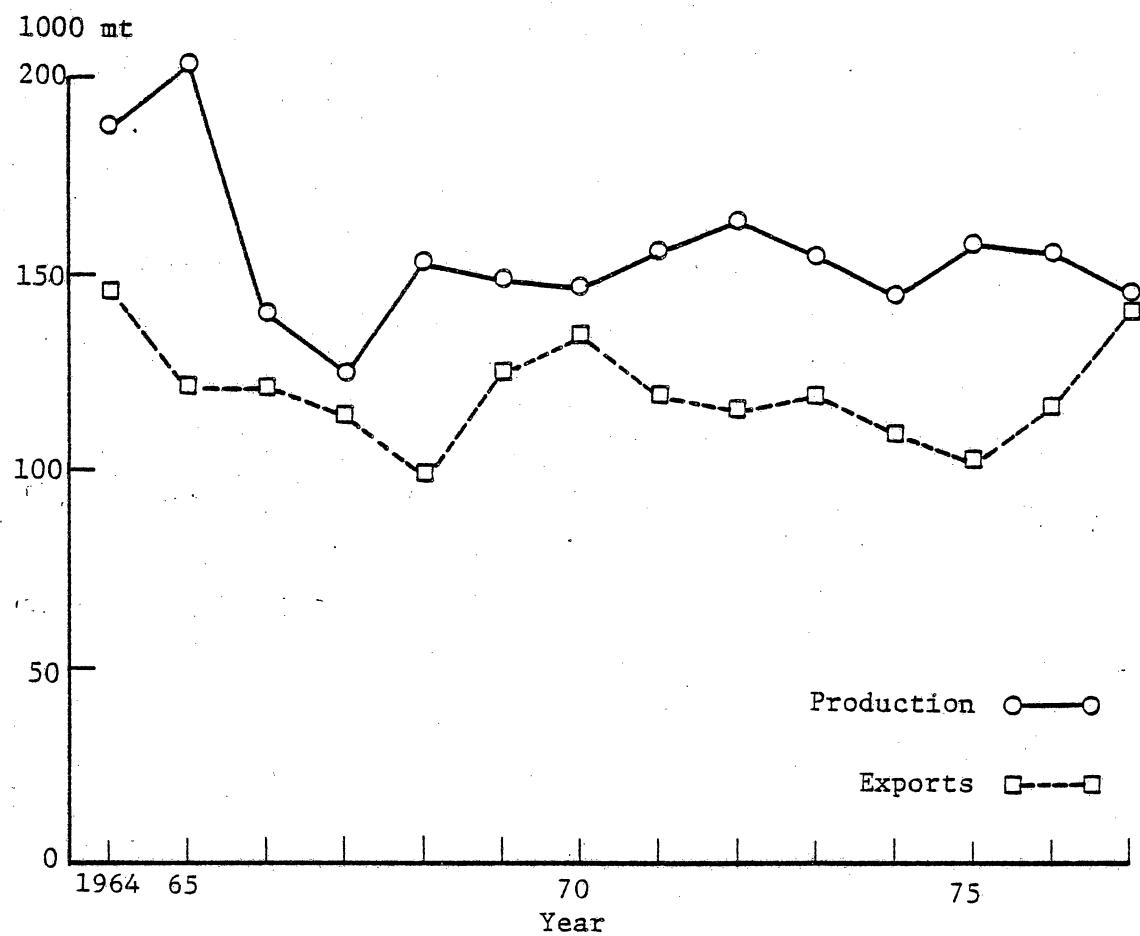
Figure 1.23 Cotton lint production and exports, Syria, 1964-77.

Source: Appendix Table A47.

increased 131% and 127%, respectively, so that total income from cotton
has grown slower than the cost of living. Cotton pricing is discussed
further in the policy section.

1.2.6.2 Cotton Seed

The greatest part of seed cotton harvested in terms of weight is the
seed. Its uses include cotton seed meal for livestock feed and most
importantly vegetable oil. Production of cotton seed oil has exhibited no
trend because, like cotton lint, total seed cotton production has remained
relatively stable (Appendix Table A47). Through 1971 approximately 20%
of the oil production was exported, but beginning in 1972 government policy
has been to prohibit exports to satisfy growing domestic consumer demand.
Per capita consumption increased in 1972-73 but is has been declining since,
because total production has not increased. With no cotton seed oil imports,
in a sense Syria is self-sufficient in cotton seed oil.
    Prices for cotton seed oil have been to increase, especially through
1974 (Appendix Table A36). When prices more than doubled from 1974 to
1975, the government established a voucher system for cotton seed oil
like that for rice. Under the voucher system each consumer may buy up
to 250 grams of vegetable oil per month at the ration price and additional
purchases at a "market" price. The voucher and "market" prices have remained
at the 1975 level and thus their real prices have been declining with
inflation.[1] Cotton seed oil prices are the same throughout Syria, an apparent
advantage to more prosperous areas like Damascus.

1.2.6.3 Olive Oil

Olives are used primarily for oil. The production trend for olive
oil is positive with rather large annual fluctuations common to olive
production (Figure 1.24). Olive oil production has more than supplemented
the stable cotton seed oil production. Increases in olive production
have exceeded population growth, thus per capita consumption of olive oil
has been increasing. The self-sufficiency goal appears to be fulfilled
as imports are negligible; exports, which were minor, have dropped to
zero apparently to satisfy domestic demand.
    Olive oil prices move relatively freely as almost all processing is
in private hands. Prices at the wholesale and retail levels have doubled
since 1963, an annual rate of increase which is among the lowest among
food products. Most inflationary pressures have ocurred since 1971 in
Damascus and 1973 in Aleppo.

1.2.6.4 Sugar

An important part of the Syrian diet, sugar consumption per capita
is approximately 25 kg per year. Government policy is for greater domestic
sugar supplies. Two new refining plants have been added to the existing
three. Self-sufficiency in sugar has become more remote since 1968 when
imports increased substantially and remained at high levels. Sugar beet

---

[1] An estimated subsidy cost for vegetable oil in 1977 is 4.5 million S.P.,
using the 1977 production, 250 grams per person per month, 148 piasters/kilo
wholesale voucher price, and 240 piasters/kilo cost of vegetable oil
supplied by the General Institute of Consumption-Wholesale Division.
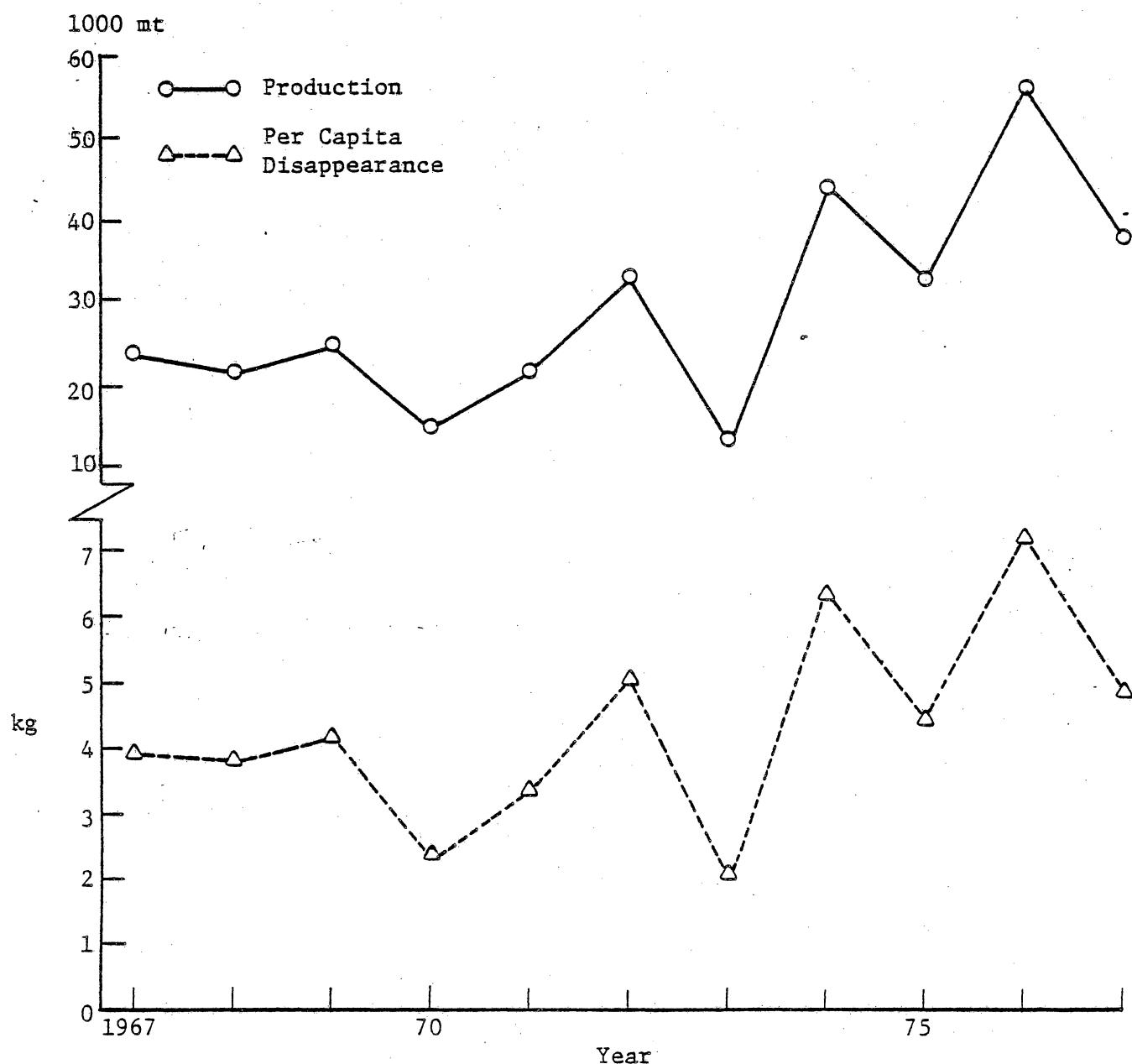
Figure 1.24 Production and per capita disappearance of olive oil, Syria, 1967-77.

Source: Appendix Table A65.

production exhibited a positive trend during 1964 to 1971 but no trend is apparent since1972 (Figure 1.25).

As with rice and cotton seed oil, a voucher system is applicable for sugar purchases. The rationed amount per month for each consumer is 1.5 kg, approximately two-thirds of total per capita consumption. Voucher prices, established in 1973, have remained at 1972 levels to date, implying declining real prices (Appendix Table A38). Market prices since 1973 have doubled. With other voucher prices, sugar prices are equal throuhout Syria. Recently, imported sugar has actually been priced below the voucher wholesale price, thus generating a per unit profit for the government. Since the government-supported sugar beet price is considerably above world levels, higher sugar production may result in monetary transfers from consumers to producers of sugar beets, sugar, and refined sugar importers.

1.2.6.5 Tobacco

Tobacco, another important cash crop, is grown on flat as well as hilly and mountainous terrain, from near Jordan to the Turkish border. Production has exhibited a positive trend since 1970 when the use of more fertilizer and a switch to American varieties were encouraged. Syria has been a traditional exporter of raw tobacco (Figure 1.26), but the terms of trade generate losses from the importation of more valuable cigarettes (Table 1.12). Per capita consumption has been relatively stable during 1964 to 1977 at between 1.5 - 2.0 kg, omitting the poor 1971-72 crop years. Tobacco prices to farmers are comparable to North Carolina, USA, prices; retail prices are increasing faster for imported brands than for domestic ones. Tobacco monopoly authorities readily indicated that 20 percent or more of the cigarette sales are lost to smuggled brands due to the 40 percent price differential. Apparently tobacco generates considerable revenue from domestic cigarette sales but is not directly earning foreign exchange due to the barter agreement with U.S. companies.

1.2.7 Summary

Agriculture and consumption habits in Syria have undergone changes over time. To meet rising demand from increasing population and higher incomes, large increases in plant and animal supplies (production and imports) have been necessary. After a serious decline in total agricultural production during the second half of the 1960's through the early 1970's, plant production has increased substantially, particularly feed grains, fruits, and vegetables. Wheat production has increased but the vagaries of weather result in large annual fluctuations. Cotton and sugar beet production have not increased. In animal production, dairy, eggs, poultry, and beef have increased output while sheep meat output has declined.

Progress in achieving self-sufficiency has been lacking except for a few commodities such as potatoes, dairy, and eggs. Imports have continued to grow in weight and value, contributing to a balance of payments problem. Prices for foodstuffs have been increasing rapidly and now outpace the general price indices at the retail and wholesale levels. Consumers have made changes in their diet: cereal consumption has remained relatively stable in spite of decreasing real prices, while fruit, vegetable, dairy, and egg consumption (per capita) have increased despite increasing real prices.

1000 mt
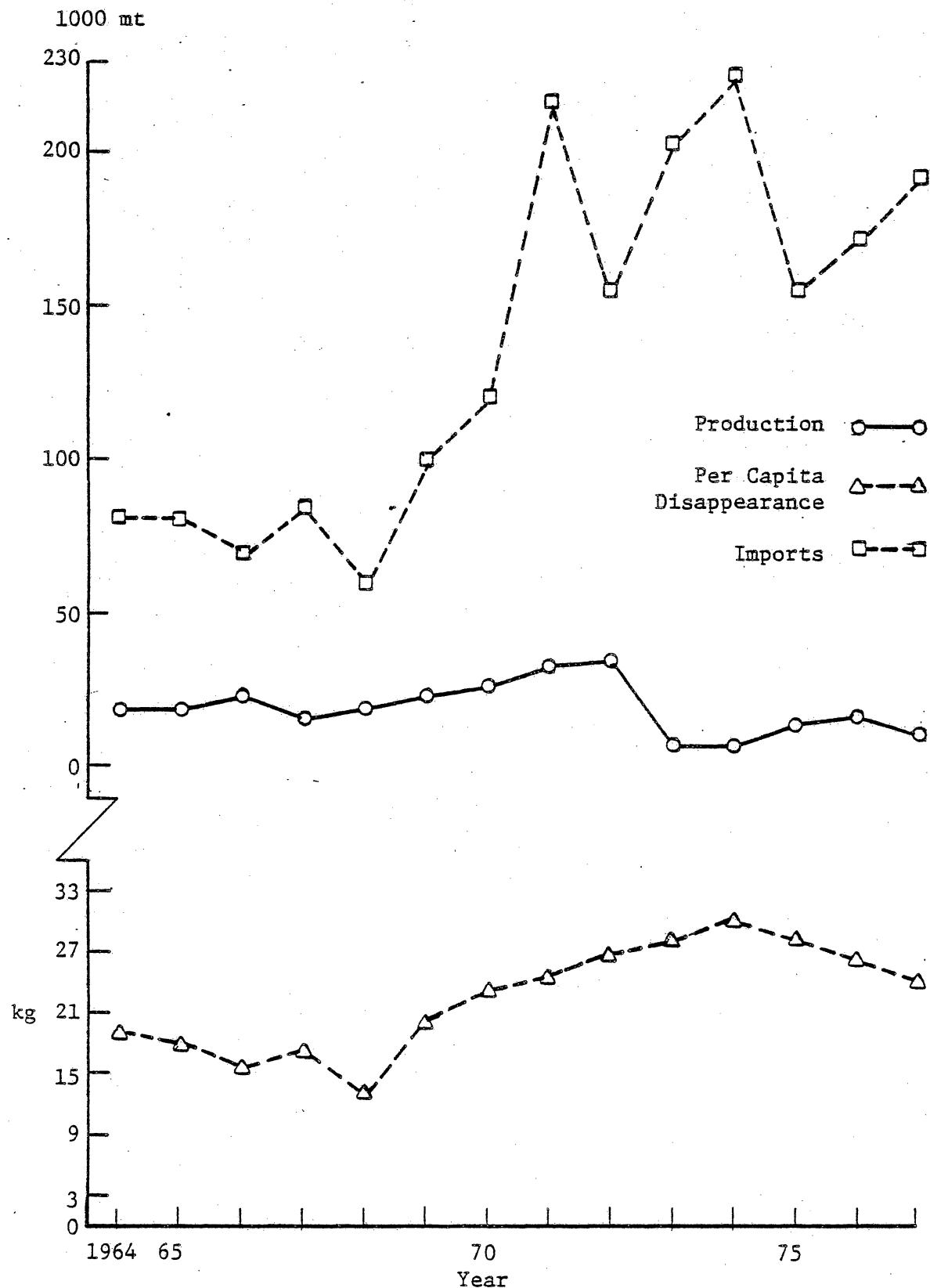
Figure 1.25 Sugar production, imports, and per capita disappearance,
Syria, 1964-77.

Source: Appendix Table A46.
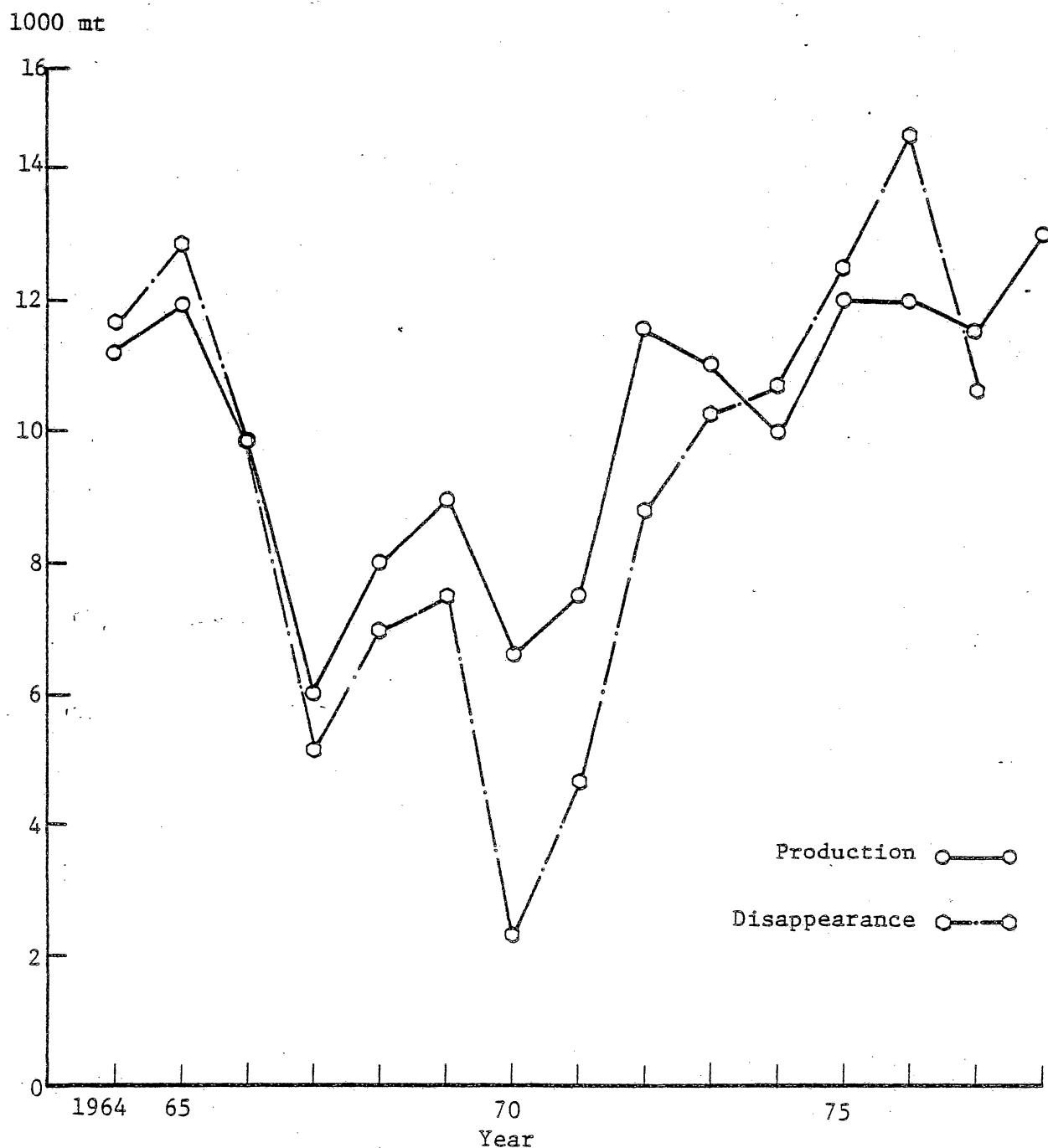
Figure 1.26 Tobacco production and disappearance, Syria, 1964-78.

Source: Appendix Table A48.

Among the industrial crops, cotton was the leading earner of foreign exchange until 1974 when it was exceeded by petroleum exports. Cotton is still a major source of foreign earnings for Syria but its production has been discouraged by recent SARG policy. [Evans].

1.3 PRICE POLICY APPRAISAL

Since SARG is directly involved in production, marketing, and price policy for all major commodities and serveral lesser ones, a comprehensive appraisal of the operation and results of existing programs bearing on price policy would be a significant undertaking. Hence, given the assessment nature of this short-term project, only highlights of the major elements of SARG agricultural price policy as observed by the team during the two months in SAR will be discussed. Several evaluative comments on price policy have already been presented on Sections 1.1 and 1.2 of this report.

1.3.1 General

Price policy, as well as its results, can only be assessed with regard to policy objectives and the performance of the sectors concerned. These objectives, which included stabilizing prices, increasing producers' income, reallocating production, achieving self-sufficiency in some crops, protecting producers and consumers from exploitation by middlemen, improving nutrition, increasing use of cooperative marketing and keeping product prices received by farmers in line with input prices paid, were discussed in some detail in Section 1.1.

A broad generalization would be that only since the mid-1970's has Syrian agriculture performed as well as during the early 1960's. (See Table 1.3). That is, production has not been as consistently high as during that period. Per capita production has been lower recently than during 1961-1965, Table 1.3. Thus, SAR has been forced to increase its dependence on imports and/or reduce exports of certain agricultural products. Production, consumption, trade, and self-sufficiency trends for all major items were discussed in Section 1.2. Note that the Food and Live Animals group was becoming increasingly dependent on imports between 1970 and 1977, Tabl 1.12. Only textile fibers showed an improved trade balance during this recent period. Only eggs, potatoes, and vegetables have experienced improvement in their "self-sufficiency" ratios recently, Table 1.13. This is in spite of high levels of total agricultural production in 1975-1977, Table 1.3. Gains achieved in total production have been diminished by the rapid growth in Syrian population and improved diets. Small farm size, population growth, erratic rainfall, and agricultural labor shortages are major constraints on Syria's ability to fulfill the various objectives of the five-year plan.

At this point, observations on genral price policy items made earlier will be reviewed briefly before examining selected commodities in more detail.

Agricultural production is probably one of the most difficult economic activities to manage within any economy due to the small scale of production, perishability, and the effect of weather on yields. Marketing of agricultural and livestock products, particularly highly perishable items, is even more complex due to the coordination of assembly, processing, storage, and distribution activities required to provide food supplies evenly througout the country during the year. SARG needs to critically evaluate their continuing thrust into both the regulation of production and, in particular, actual marketing operations. Monopoly of the cereals, cotton, tobacco,

sugar beets, and peanuts areas plus control over food and feed imports
and exports provides SARG considerable power as well as responsibility
in the agricultural sector. It appears that SARG may currently be at a
point of over-expansion in the production, and in particular, marketing
activities in agriculture. Why do the authors believe this to be true?
Specific situations will be provided under commodity sections to follow.
Examples offered here will not necessarily prove that SARG is too involved
in agriculture. However, evidence and experience from other countries
tend to support the general proposition that while government price supports
and hectarage programs can increase production and allocate major crops,
government attempts at regulating agriculture from production through
marketing have not been particularly successful and frequently wasteful.

The difficulty in effectively administering the production and
marketing of several crops and/or livestock products is great because
of substitutibility among crops by producers and among end-products by
consumers. Slight misjudgements by SARG in terms of price setting and
production planning can result in surpluses or shortages of specific items
not to mention the implied misallocation of resources. These shortages and
surpluses are not always apparent due to price regulations being violated
and/or the illegal movement of commodities among Turkey, Jordan, Lebanon,
and Syria is response to differential prices among these states. In contrast,
the control of a few major crops with some marketing activities to control
the excesses of the sector would seem to be the more fruitful route.
Subsidization of inputs--fertilizers, credit, improved seeds, and so on--
is a good program for increasing and reallocating production when used with
price floors for major crops.

Widespread attempts to process and market most of the agricultural
produce seem unwarranted in view of the objectives of the 5-year plan. A
major concern seems to be with exploitation by middlemen. This should be
largely solvable by the distribution of more price and supply information,
modest counterbalancing trade activities by government companies, as well as
encouraging production with farm price supports and input subsidies. Attempting
to dominate the whole of agriculture production and marketing could be very
costly for SARG.

Another relevant point concerns how well current SARG programs are
performing. Are they working as planned? Actually, only those closet to
the planning process know and even they do not seem to be aware of the total
costs of the programs. We understand that all plans were evaluated annually
in terms of target volumes but not in terms of costs.

Price stability has been an important objective of the SARG agricultural
program. It is important to note that SARG price programs were conceived
during a time when world prices were quite stable, i.e., the 1960's,
Figure 1.27. Using cotton and wheat as examples of major world crop prices,
we see these prices were very stable from 1960 until about 1971. Thus, setting
prices and planning for production, consumption, exports, and imports should
have been much simpler before 1972 than since. There was a critical change
in the planning enviroment in 1971. Prior to that time agricultural crop
prices were similar in behavior to administered manufactured items' prices.
Clearly, prices are much easier to administer when conditions are stable
than when uncertain as has been the case since 1971. Thus, while Syrian
cereal, cotton, tobacco, peanut, and other major supported crop prices
could easily be set at higher levels as world prices rose, it apparently has
been politically difficult to adjust downward as world prices fell.
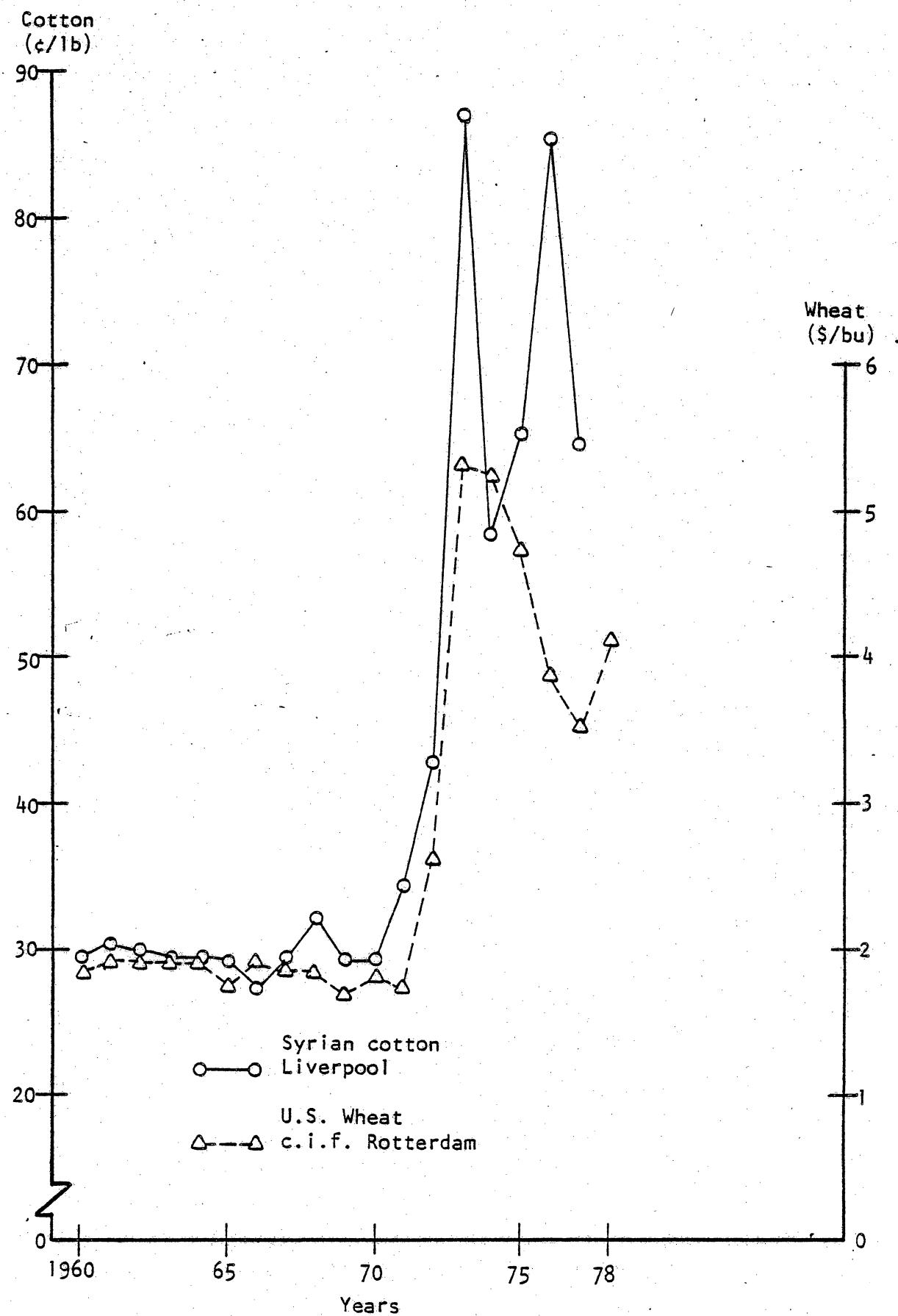
Figure 1.27 Season average prices for Syrian cotton at Liverpool and
U.S. wheat at Rotterdam, 1960-1978.

Of price reported since 1967, only lentils prices have been reduced by SARG.[1] Some degree of flexibility should be considered in setting farm prices so that domestic prices do not get far out of line with import prices. It may be preferable to set price floors or support prices rather than specific exchange price levels. Price floors permit prices to (1) increase as demand exceeds supply and (2) return to the floor as supplies exceed demand. This would promote some internal direction to producers and planners in Syria. Setting specific exchange prices where supply will equal demand is an impossible task. However, with price floors, the government can absorb the surpluses and let higher prices ration supplies when shortages occur.

The attempt to set both wholesale and retail prices for numerous food items does not seem well advised. Further, it does not seem practically possible due to the reasons mentioned in Section 1.1. Assembly, storage, processing, and distribution activities are to complex to apply a fixed margin to many products. Here, again, the use of limited government marketing and monitoring efforts combined with freer international trade should suffice to thwart the potentially exploitive middleman.

Whenever prices are set a levels other than those dictated by market conditions, benefits, and costs are altered. Syrian wheat producers receive high wheat prices while consumers pay very low bread prices. For example, the average wheat price received by U.S. farmers during 1977/78 was $85.58 per metric ton while the SAR fixed price was $153.84 per metric ton not including a $30.77 per ton early delivery premium. However, U.S. 1977 retail bread price was about 78¢/kg compared to 14¢/kg retail for bread in Syria (55 Piasters/kg). Since Syrian producers received 64 to 69 Piasters/kg for wheat and bread costs only 35 to 55 Piasters/kg, a considerable transfer payment to bread consumers is involved. Actually both Syrian producers and consumers are subsidized because recent wheat prices were significantly greater than world wheat prices and consumers continued to pay extremely low bread prices. If the economy were generating all of its own income, then some citizens would be penalized in order to subsidize wheat producers and bread consumers. If government income was from progressive taxes, then the wealthier people would be subsidizing the lower income people. A cursory look at SARG's budget suggests that a significant amount of government revenue may come from external grants and loans so that subsidy costs may not be of immediate concern. However, the questions of how much subsidy is involved in various government agricultural operations is of concern because of the question of economic efficiency. Both price/cost and operating subsidies are of interest. The team could not compare the efficiency of private firms with government operations but several conversations suggested that government operations were inefficient.[2] It would be ironic if government production regulations and marketing operations were costing Syrians significantly more than if left to the private sector.

The team spent considerable time contacting personnel in the State Planning Commission, Ministry of Supply and Internal Trade, Ministry of Finance and other agencies trying to determine the source and allocation of direct and operating subsidies for various commodities without much success.

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[1]SAR, The Annual Agricultural Statistical Abstract 1976, Min. of Agr. and Agraian Reform.

[2]In some cases, government companies were required to hire handicapped people for social welfare reasons. This is not the inefficiency alluded to by interviewers.

Six hundred million Syrian pounds have been budgeted in recent years for
subsidies for flour, sugar, rice, vegetable oils and some fuels but actual
deficits may be much higher according to official sources. The budgeted
wheat subsidy was 430 million S.P. for 1978. If we assume 1978 wheat production
as 1.6 million tons and farm price as approximately 680 S.P. per ton, then
the value of production would be 1,088 million S.P. Thus, the flour subsidy
would be 40 percent of the total farm level value of the wheat crop. Is
this too high? It is clearly a relatively large subsidy to wheat producers
and flour users. The rice subsidy, at 114 million S.P., was one-fourth
that for wheat and sugar was one-fifth at 95 million S.P. These subsidies
are relatively large and will continue to grow as farm prices are set
at higher levels unless consumer prices are increased accordingly. The
planned subsidies are probably lower than actual subsidies. The more
reliant the SAR agricultural economy becomes on subsidies, the more maladjusted
it becomes relative to both domestic and international supply and demand
conditions. This is why a careful analysis of subsidy dependence on a crop
by crop basis is needed. Both price and input subsidies must be considered.

1.3.2 Cereals

Major food and feed crops are probably the most amenable to influence
by price and production policies because of their storability and need
for processing before consumption. This is particularly true of wheat.
Nevertheless, increasing amounts of imported wheat have been required
recently due to production not keeping pace with population growth.

Irregular rainfall plagues SARG's comprehensive production and
marketing program for cereals. Supply problems are further hampered by
producers keeping 50 percent or more of the crop, depending on total
production. Many producers continue to make bread from their own wheat
although not economical based on the wheat/bread price ratio. Cereals
Organization people suggested that the government was trying to get (a) everyone
to eat commercially baked bread and (b) up to 85 percent of the bread
production for government bakeries. One source reported government bakeries
currently have about 9 percent of the bread supplied by bakeries.

If a large segment of the population is currently baking bread from
their own wheat, then government subsidy costs will rise markedly if
these people switch to bakery bread. Current attempts to move consumers
from 35 Piasters/kg bread to 55 and 85 Piasters/kg bread will help reduce
subsidy costs but this effort may be overwhelmed by a larger percentage
of the population using bakery bread.

Theoretically, we could attempt to evaluate the effects of SARG
price policy for various crops in terms of supply response and allocation
if other variables such as hectarage, marketing costs and selling prices
were free to move in response to changes in supply and demand. However, SARG
policy apparently determines hectarage planted and purchases and allocates
all output among flour and other end products. For example, wheat hectarage
increased 45 percent from 1967-69 to 1974-76, production increased 87 percent
and price by 66 percent. In contrast, seed cotton price increased 65 percent,
production increased only 10 percent and hectarage decreased by 27 percent
during the same period, Table 1.21. In this divergence in wheat and cotton
production and, particularly, hectarage to be explained by price incentives,
subsidized inputs or direct allocation by the SARG "intensification of
agriculture" plan? Barley price increased 127 percent 1967-69 to 1974-76 but

Table 1.21 Changes in hectarage, production, yields, and prices,
major state regulated crops, 1967-69 and 1974-76,
three-year averages.

| Crop | Unit | 3-Year Period | | Percent Change |
		1967-69	1974-76	
Wheat	(1000 Ha)	1104.0	1606.0	+ 45.5
	(1000 Mt)	884.1	1656.7	+ 87.4
	(Piasters/kg)	28.6	48.0	+ 68.0
Yield				+ 28.8
Barley	(1000 Ha)	643.3	960.0	+ 49.2
	(1000 Mt)	576.0	770.0	+ 33.6
	(Piasters/kg)	16.8	38.2	+ 127.2
Yield				− 10.4
Lentils	(1000 Ha)	95.3	109.6	+ 14.7
	(1000 Mt)	77.4	95.4	+ 23.2
	(Piasters/kg)[a]	40.0	99.0	+ 147.0
Yield				7.4
Seed Cotton	(1000 Ha)	272.3	198.3	− 27.2
	(1000 Mt)	368.0	403.0	+ 9.6
	(Piasters/kg)	79.3	131.6	+ 66.0
Yield				+ 50.5
Tobacco	(1000 Ha)	10.3	17.0	+ 65.0
	(1000 Mt)	7.7	11.4	+ 48.0
	(Piasters/kg)			− 10.3
Yield				
Sugar beets	(1000 Ha)	7.1	7.7	+ 7.3
	(1000 Mt)	169.7	189.5	+ 11.6
	(Piasters/kg)[b]	70.0	126.6	+ 81.0
Yield				3.1
Peanuts	(1000 Ha)	8.7	12.8	+ 47.1
	(1000 Mt)	14.8	21.5	+ 45.2
Yield				− 1.3
Total	(1000 Ha)	2149.0	2936.9	+ 36.7

[a] Lentils base price 1969-71 for red lentils.

[b] Autumn price.

Source: SARG, Agr. Stat. Abstract 1976, MAAR.

hectarage increased only 51 percent and production by only 34 percent.
Lentils price experienced the largest relative increase, 147 percent, but
lentil hectarage increased only 15 percent and production 23 percent.

In contrast to the percentage changes in hectarage, total production,
yields and prices for cereals and other "controlled" crops between 1967-69
and 1974-76, changes for major "uncontrolled" vegetable crops were
considerably greater on the whole, compare Table 1.21 and 1.22. Barley
and lentils had the largest relative price increase and the lowest relative
increase in production (except for cotton) Table 1.21. Yields increased only
modestly or actually declined during the eight year period except for cotton
and wheat. Vegetable yields increased markedly during the same period, Table
1.22.

Of course, these crude comparisons between "controlled" and "uncontrolled"
crops prove nothing. There may be other good explanations for the apparent
discrepancies in performance. However, it also may be that vegetable produc-
tion has expaned more rapidly and experienced greater yield increases than
major field crops due to their freer economic environment. "Controlled"
crop producers know they can get only government prices and no higher.
Meanwhile, vegetables' prices have increased more rapidly than government
established prices, due apparently to supply and demand conditions. Price
supports for major crops that would permit prices to reflect demand conditions
might provide extra stimulus to producers.

Between the effects of variation in rainfall and government decisions
bearing directly on land use, it appears too difficult to untangle the effects
of higher prices on supply performance. Of course, we do not know the
profitibility rates among crops.

Plans for wheat production are apparently based on projected "consumption
needs" for next year of 150-160 kg/capita. These needs appear to be based
more on a desired standard quantity per person than on economic demand.

Setting farm level prices on a cost of production plus profit basis
is subject to the possiblity of establishing prices above those needed to
provide desired production or obtain the commodity by imports. While Syrian
wheat prices may have been close to or below world export prices prior to
1976, the fixed wheat price since has clearly been in excess of the cost of
imported wheat:

SAR and North European Price Wheat Price

	SARG price[a]	U.S. dark northern spring 14% Rotterdam[b]
	S.P. per metric ton	
1973	420	764
1974	510	807
1975	570	729
1976	580	573
1977	750	511
1978	770	571[c]

[a]Includes early delivery premium

[b]$ per metric ton x 3.9 conversion rate;
 year beginning

[c]7 months June-Dec average

Table 1.22 Changes in hectarage, production , yields, and prices, major "free market" crops, 1967-69 and 1974-76, three year averages.

| Crop | Unit | 3-year period | | Percent change |
		1967-69	1974-76	
Watermelon	Ha	64,556	74,894	+ 16.0
	Mt	412,821	514,718	+ 31.2
	SP/kg a/	31.3	73.6	+ 135.1
	Yield			+ 13.1
Tomatoes	Ha	17,532	29,417	+ 67.8
	Mt	179,008	429,131	+ 139.7
	Sp/kg a/	59.3	114.0	+ 92.1
	Yield			+ 58.4
Muskmelon	Ha	25,673	21,036	− 18.1
	Mt	139,762	181,306	+ 29.7
	Yield			+ 58.4
Cucumber	Ha	10,487	13,871	+ 32.3
	Mt	69,085	163,144	+ 136.1
	Sp/kg a/	69.0	145.6	+ 111.1
	Yield			+ 78.5
Potatoes	Ha	4,142	9,250	+ 123.3
	Mt	45,804	120,696	+ 163.5
	SP/kg b/	33	81.6	+ 147.5
	Yield			+ 18.0
Dry onions	Ha	5,128	7,927	+ 54.6
	Mt	47,295	122,189	+ 158.4
	SP/kg c/	25.0	62.6	+ 150.7
	Yield			+ 67.1
Squash	Ha	4,473	6,360	+ 42.2
	Mt	39,642	98,629	+ 152.6
	Yield			+ 28.3
Egg Plant	Ha	4,473	6,360	+ 42.2
	Mt	49,745	103,268	+ 107.6
	Yield			+ 46.0

a/ Damascus retail, b/ Damascus wholesale, c/ Damascus wholesale, red onions.

Source: SARG, Agr. Stat. Abstract 1976, MAAR, and CBS, Statistical Abstracts.

Supporting all major crop prices give producers little incentive for choosing among alternative crops. Further, when producers (Peasants Union) are involved directly in establishing cost-of-production-plus-profit prices, full costs of production are probably more than met, i.e., prices are probably set higher than necessary for the desired results. Clearly, man inputs are on-farm inputs which do not increase directly with the general price level or the cost of off-farm inputs. Unfortunately, the team was unable to locate any meaningful farm income data, either macro or micro. Until some idea of profitibility among enterprises and sizes of farms can be obtained, it will impossible to evaluate the effectiveness of price policy in much detail. Presumably the farm survey will obtain data for estimating farm income by size, location, and enterprise. Hopefully the survey will also provide some idea of the use of subsidized inputs. Are these inputs used on the designated crops or on a more profitable crop? Several interviews suggested the latter.

1.3.3 Cotton

Cotton appeared to be one of the best organized and operating of the monopolized programs for major crops. Cotton was the major earner of foreign exchange until 1974 when superceeded by petroleum.[1] The relatively straight forward nature of cotton production and processing facilitates its monopolization. Unlike other major crops, total cotton hectarage dropped 27 percent between 1967-69 and 1974-76 (Table 1.21) due to the policy of encouraging other crops at cotton's expense. Cotton's yield increased more than any major crop but cotton is the only major irrigated crop.

Price policy seems to be working well for cotton in terms of increasing yields per hectare. However, the raising of producer seed cotton prices annually will eventually require a subsidy for cotton growers if and when price exceeds export prices for Syrian cotton. The basic price of lint cotton sold to local Syrian textile mills compared to the average Liverpool price for Syrian cotton, CIF North Europe has been as follows:

U.S. Cents Per Pound

	SAR local mills	CIF N. Europe[a]	Difference
1971/2	21.86	38.81	16.95
1972/3	22.74	42.78	20.04
1973/4	23.90	86.61	62.71
1974/5	37.68	57.87	20.19
1975/6	40.47	65.61	25.14
1976/7	47.45	85.17	37.72
1977/8	53.35	64.06	10.71

[a]at 3.9 conversion rate pounds to dollars.

Source: Cotton Marketing Organization

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[1]F. B. Evans, Cotton in Syria, FAS-M-280, For. Agr. Service, U.S. Dept. of Agriculture, April 1978.

The policy of reducing cotton hectarage and holding production constant so that more sugar beets and other commodities can be produced seems contrary to Syria's apparent comparative advantage in cotton. Comparative advantage is indicated by increased cotton yields in the face of adverse cotton prices compared to those for cereals, soybean, and sugar beets. Further, cotton expanded rapidly from 1949 until 1965 when production was reduced due to land reform and nationalization of gins. [Evans].

As long as policymakers are aware that the drive for increased self-sufficiency in food is costing them foreign exchange from the crop which may have the greatest comparative advantage, then enough has been said.

The organization, operation, and performance of the Cotton Bureau and the Cotton Marketing Organization were impressive and might be used as a model for other organizations.

1.3.4 Vegetables and Fruits

Just as cereal crops are probably the most adaptable to state planning and regulation, aside from the severe yield variations in Syria, fruits and vegetables are probably the least amenable to regulation. Perishability, small scale production, weather, and variety of products requires considerable flexibility throughout the production, harvesting, assemble and distribution phases. Rigid pricing can result in surpluses or deficits due to the perishability of fresh fruits and vegetables. In general, vegetable production has increased more rapidly than the major regulated crops. Yields and acreage both have expanded significantly, possibly due to the price increases associated with increasing demand, compare Tables 1.21 and 1.22.

The General Organization for Fruits and Vegetables has been in operation little more than a year and clearly faces a challenge in procurring and distributing fresh produce through its own retail shops in competition with private sellers. SARG must carefully evaluate the efficiency of its state produce system because of the well known problems of adminstering fresh vegetable and fruit marketing.

Two specific problems encountered regarding state marketing involved (1) contracting before harvest for produce at a predetermined price and then having to sell at the prevailing market price upon delivery and (2) the length of time involved in getting a producer loan from state sources. Vegetable prices are so dynamic, usually due to changes in supply, that forward contracting for production at a fixed price is risky. Large supplies would reduce price and result in loss to the contractor at resale. Thus, if SARG becomes increasingly involved with fresh produce they must be prepared to deal with the inherent risks.

As to the ease with which GOFV can contract for production, one source indicated a grower could get a production loan from a private broker in an hour while requiring a week at the bank. GOFV will need to be able to provide such service if they are to compete successfully with the private sector.

The possibilty of produce loss from waste due to unresponsive marketing should be of great concern to SARG. Efficient produce marketing requires timely scheduling and pricing to avoid loss.

The team felt the present produce pricing system was working well in stimulating production and generally satisfying consumer needs because official prices were not always enforced when market conditions were out of line with administered prices. Due to the complex nature of the fresh produce industry many aspects were not assessed.

1.3.5 Sugar

Prices to Syrian sugar beet growers may be the highest in the world. Syrian sugar beet growers received 125-140 S.P./metric ton in 1976 while U.S. growers (who are also subsidized) received approximately 86 S.P./metric tons. In spite of the relatively high prices, sugar production in Syria has not increased appreciably since the mid-1960's, Appendix Table A46. Apparent consumption (i.e., disappearance) of sugar in Syria doubled from 1964-66 to 1975-77 and the proportion imported increased from 78 percent to 84 percent. Clearly, self-sufficiency is not being attained in sugar even with high and steadily increasing prices for sugar beets. Some producers have been required to grow sugar beets as opposed to crops of their preference. These factors suggest that sugar does not have a comparative advantage for Syrian farmers, thus preventing the desired supply response. The best economic solution may be to use the irrigated hectarage for other crops and import even more sugar due to expected abundant world supplies and moderate prices. However, since the Arab Unity Economic Council has advised members to be self-sufficient in sugar, political considerations seem to outweigh economic considerations in the case of sugar. Many countries, including the U.S., protect their domestic sugar growers beyond economic reasonableness, so SARG is not unique in its sugar policy.

The sugar subsidy in 1978 was 94,771,000 S.P. How this subsidy was incorporate into the sugar program was not determined by the team but it seems large by any measure.

Let us attempt a rough estimate of sugar value at the wholesale level in Syria. Total sugar disappearance during 1975-77 was around 204,400 metric tons or 26.5 kg/capita, Appendix Table A46. Population was about eight million in 1977. Rationed quantity at 18 kg/capita rationed would require 144,000 mt, leaving 60,400 mt for "free" use. At wholesale values that is:

Category

quota   .82 S.P./kg x 144 mil kg = 118,080,000 S.P.

"free"   2.92 S.P./kg x 60.4 mil kg = 176,368,000 S.P.
                           204.4 mil kg   294,448,000 S.P.

so that a 94,777,000 S.P. subsidy would be 32 percent of this estimated wholesale value. The weighted average wholesale would be price is 1,44 S.P./kg. Growers were paid 130 S.P. to 145 S.P. per metric ton for autumn and summer beets, respectively. At 16 percent sugar yield that is 81 to 90 Piasters kg for sugar in beet form. But these prices are for only 15 percent or so of the crop as the remainder is imported at similar prices for raw sugar. Thus, the average wholesale price for sugar appears to be significantly greater than the price being paid for imported sugar and the domestic crop. What we do not are the processing costs for the domestic crop and handling and distribution costs for the imported sugar. However, it appears that sugar

may be breaking even or be profitable for SARG at current world prices
due to profits on imports. The U.S. retail price was 1.85 S.L. per
kg in 1977, considerablly below the "free" price of 3.00 S.L. in Damascus.
    Since imported sugar costs appear to be significantly less than
domestically produced sugar, subsidy costs will increase if Syria be-
comes more self-sufficient in sugar under current and projected world
supply/demand conditions.

1.3.6 Tobacco

    The tobacco monopoly seemed to be a smoothly operating organiza-
tion from production through marketing. Tobacco makes money for SARG
as no known price subsidies are required. Again, prices to growers
are based on costs of production which are probably inflated due to the
method of setting costs. One major problem was that smuggling has re-
duced sales of imported cigarettes. Smuggled U.S. brands sold at 1.5 S.P.
per pack versus legal price of 2.5 S.P. Thus, Syrian consumers who pay
legal prices are clearly subsidizing the tobacco program.
    Tobacco production has expanded due entirely to increased hectarage
as yields have remained unchanged on the average, Table 1.21. As with
other crops, production units are small. Production has been relatively
stable although most hectarage is rain-fed, Appendix Table A46.

1.3.7 Animal Products

    If Syrian consumers follow the usual consumption trends as incomes
increase, the demand for meat, poultry and eggs will rise dramatically,
Table 1.8 and 1.9. The availability of such items will depend on SARG
policy to a great extent.
    Meat, poultry, and dairy products fall within the "semi-free" pricing
system. However, state policy affects the imports and exports of animal
products. For example, SARG attempts to hold price down by importing meat
and chickens but meat prices have risen faster than other commodities,
Table 1.2. Importing to keep domestic prices down obviously lowers the
economic incentive for Syrian sheep and poultry producers. Further, some
suggested that the threat of nationalization has deterred investment in
broiler production facilities.
    Problems with administering prices and supply in meats and poultry
are similar to those for fresh fruits and vegetables. Perishability makes
it imperative that prices be free to adjust to supply and demand in order
to prevent surpluses (waste) or deficits.
    In spite of the semi-free nature of animal product markets, prices
are set for poultry, eggs, and meat in Damascus. Chicken and egg maximum
prices were fixed for one and one-half years during one period. This
action seems unreasonable in view of the rapidly rising demand for
chickens. The setting of meat prices only in Damascus has resulted in
some loss to the meat organization because they cannot recover their
costs of pruchasing and processing sheep. One source estimated losses
of 22 million S.P. in 1977 and 20 million S.P. in 1978 du to the cost-price
squeeze on the state's Damascus meat operations. Further, government
processing and distribution facilities are not used to full capacity
because of the cost-price squeeze. One estimate was that the state

provided only half of Damascus sheep meat under the price ceiling and
by so doing minimized losses. This is an example of how price policy
reduced physical efficiency in marketing.

It seems clear that the meat organization needs the authority to
adjust retail prices in line with costs.

Meat, poultry, and vegetable prices have risen more rapidly than
other commodity prices in Syria. This is probably due to the increase in
demand for these items compared to that for cereals and starchy foods.
Hence, the policy should be to promote production of poultry and sheep
meat as demand for these products will continue to grow as population and
income increase.

Having examined the major commodity groups in general, let us
return to some general aspects of SARG price policy.

It can be stated that SARG has officially stablized prices for major
crops and consumer items such as bread, rice, sugar, and vegetable oil
through settling prices and rationing. However, in the case of cereals
we do not really know at what "price" a large volume of the wheat and
barley are selling because the government has generally received far less
than half the crop. Is this because producers prefer to keep the remainder
of the crop for on-the-farm use or do they sell it for higher prices elsewhere?
It is difficult to determine wheat effect price has on wheat crop acquisitions
by SARG. A consistent 38-39 percent of the crop was acquired during 1974,
1975, and 1976 when prices reached the 477 to 541 SL per ton price levels.
Of course, these were also larger wheat production years. The percent purchased
dropped to 29 percent in 1977 when total production declined and price increased
by 20 percent.

Lentils possibly provide an example of the government's breaking
the farmer's reservation price level in 1975 and 1976, Figure 1.27. The
government purchased only 0.9 to 45.0 percent of the lentil crop during
1970 to 1974. However, when price jumped by almost 80 percent between
1974 and 1975, the government got 79 and 98 percent of production in 1975
and 1976, respectively. This explains SARG's reducing the lentil price
in 1977 and 1978. It appears that growers were willing to relenquish
practically all of the lentil crop at the relatively high prices for 1975,
1976, and 1977.

An economic explanation of the high crop retention rates by producers
would be that they have been getting higher prices or value-in-use elsewhere
for wheat, lentils, and barley. Then, as prices rose significantly in
recent years, growers have sold more to the government and kept less. Of
course, there may be other than economic reasons for the producers withholding
large from the market. Unfortunately, the team did not determine the
disposition of the non-government wheat, barley, and lentils but this
seems of importance in order to determine the value of these major crops
to producers.

Major crops' prices have been set on a cost of production basis,
largely disregarding world conditions, and have closely paralleled the
Damascus Consumer Price Index (CPI) in a relative sense, Figure 1.28
(Logarithmic scale). Thus, the major prices are parity prices to the
extent the CPI represents prices paid by farmers. However, farm level costs
probably haven't risen as fast as the Damascus CPI so that the government
set prices are somewhat inflationary.

How much are the present supported prices aiding farmers on very
small production units? Obviously, higher prices are preferred to lower
prices but is the hectarage large enough to support a farmer and his
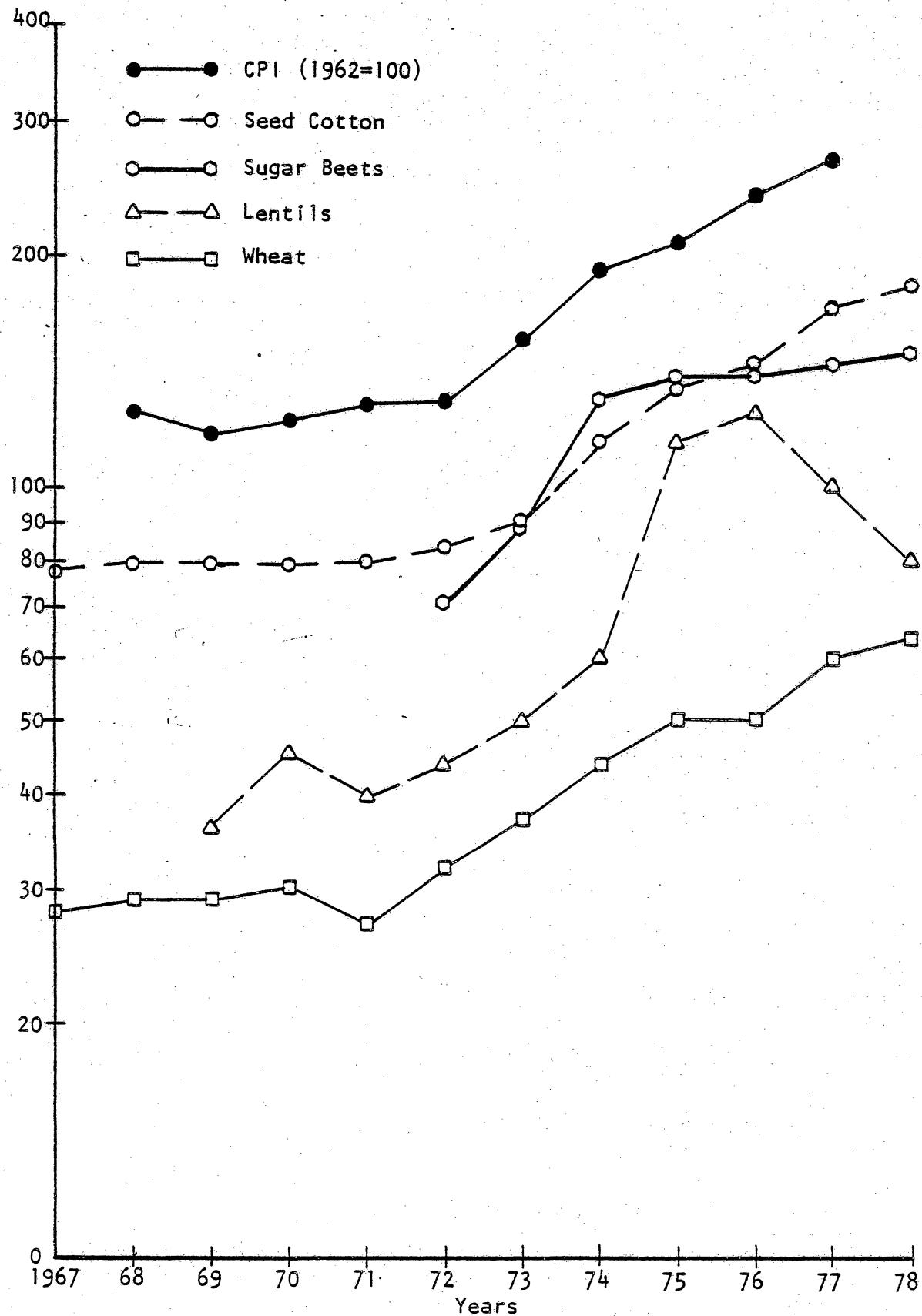
Figure 1.28 Government purchase prices for wheat, seed cotton, sugar beets and lentils and Damascus Retail Consumer Price Index.

family so they won't be discouraged and leave for the city or a neighboring country? The farm survey should help answer these questions. If wheat farmers are selling less than half of their crop to the state, then the support price is only directly applicable to a small volume. However, it does place a guaranteed price floor under the entire crop. The great variation in crop yields must affect farm incomes adversely. Perhaps some type of crop insurance or direct payments to farmers could be used to supplement small farm income.

Finally, the budgeted cost for price subsidies, which is probably considerably below actual subsidies, seems high relative to the value of total agricultural production. The value of agricultural production at current prices was 5898.6 mil S.P. in 1976, averaging 4639.3 mil S.P. during 1974-1976.[3] Value of total plant production averaged over two-thirds of total agricultural production at 3342.3 mil S.P. for 1974-76 and 4031.3 mil S.P. in 1976. Thus the 600 mil S.P. for price subsidies would be 10 percent of the total value of agricultural production in 1976 and 15 percent of the total value of plant production. Since this 600 mil S.P. is for known or specified subsidies and there are probably many hidden subsidies, the full extent of subsidies within the agricultural sector may be more extensive than realized.

The program of keeping farm prices high and food prices moderate must be financed from sources outside the agricultural sector. We have noted that SARG's income may be boosted by sources of revenue external to the SAR economy. While the subsidies may not be costing SARG directly, they are inflationary if productivity does not match the money provided by subsidies. Similar inflationary effects occur if SARG is financing subsidies by increasing the money supply. Forker noted the Turkish government's problem with a price policy similar to that of Syria:

"The argument goes that farmers need the increase in price
to cover increases in costs and provide a more equitable distribution
of income. Narrower margins, the difference between government purchase
price and the sales price, for domestic sales are justified as necessary
to keep down consumer prices and prevent inflation. However, the higher
prices to farmers, the resultant increase in purchasing power, and the
resultant greater loss of the government all create inflationary pressure.
So the government finds itself on a continuous treadmill of reasons for
higher farm prices, narrower margins, and lower consumer prices which
generate pressures for inflation and thus in turn a logical base for
higher farm prices, narrower margins, etc."

Current government price policy may lead to an increasingly infla-tionary situation. Consider the effect of all Syrian's buying bread from the state wheat-flour program verus the current situation where most wheat is retained for the farmer's discretionary use. Such activity would greatly increase the cost of price subsidies for the wheat/flour subsector. Increased self-sufficiency in sugar will increase subsidy costs due to the high domestic prices versus world sugar prices. Further, if the drive for self-sufficiency in certain crops infringes on cotton hectarage, cotton production, exports, and foreign exchange will be reduced.

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[3] CBS, _Statistical Abstract 1977_, p. 179.

In all, SARG's policies have, at least officially, stabilized prices for major crops and basic food items such as bread, rice, sugar, and vegetable oils. Commodities in freer markets have experienced significantly greater increases in production than have the controlled crops. Unfortunately these crops--vegetables, fruits, and animal products--have had some variable and faster rising than the major crops. Of course, the increased production is probably associated with these attractive prices.

The major unanswered question concerns the costs of the state's production and market intervention programs. These costs include (1) direct price subsidies, (2) subsidized operating costs for state companies and, possibly, (3) the opportunity costs of using state funds for traditional public services such as schools, roads, hospitals, parks, and other community enhancing facilities and services which would improve the quality of life in rural areas, leaving most of the agricultural production and marketing activities to the private sector. This does not meat that the state should not attempt to direct and encourage production or influence efficient marketing. It is to suggest that careful scrutiny be paid to the total costs of current and proposed programs, costs in terms of both direct monetary and indirect opportunity costs. Other means of subsidizing consumers' and producers' incomes may not result in as severe a misallocation of resources and yet increase total welfare.

1.4 COMMODITY DEMAND PROJECTIONS

SARG bears responsibility for supplying Syrian consumers with major foodstuffs as well as determining the production and trade policies for major industrial crops such as cotton, sugar, and tobacco as discussed in previous sections. Further, an announced goal is a high level of self-sufficiency for major food crops. Thus, SARG must continually plan for consumption both for next year and in the rather distant future due to the time required to obtain significant increases in production and shifts within the crop/livestock mix.

Estimating the total food requirements or consumption needs for 1985 and 200 based on 1975 consumption involves simply multiplying the desired levels of food items per capita by projected population for 1985 and 2000. Only two datum are needed, the food item per capita base consumption level and the projected population. However, this would simply be a constant per capita consumption figure projected into the future rather than consumer <u>demand</u> projections. The latter should account for changes in (a) relative prices, (b) consumer income or buying power and (c) consumer tastes and preferences. Consumer demand projections attempt to capture the general behavior of the consuming population as they respond to the above mentioned variables. Data required for demand projections include estimates of (a) actual consumption in a base level period (here, 1975), (b) projections of consumer income at constant prices for the desired future years, (c) estimates of income elasticities for the various food items, and (d) population projections. The income elasticities presumably reflect consumers' food purchasing behavior as increases in buying power permit them to fulfill tastes and preferences for an improved and/or more varied diet.[1] Population and income are the main factors in shifting food demand with relative price shifts usually playing only minor roles. A one percent increase in population increases the demand for food by one percent. Increased consumer income over time also raises the demand for food. The following formula illustrates vividly how population and income increases combine to increase the annual rate of growth in food demand. The annual percentage rate of increase in food consumption is:[2]

$$d = p + gn \qquad\qquad (1)$$

Where: d = annual compound percentage change in food demand
        p = annual compound percentage growth in population
        g = percent growth in income per capita per year
        n = income elasticity of food consumption[3]

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[1] Of course, the higher income level diet may actually be worse nutritionally than the lower income diet. Consumer tastes and preferences and nutrition are not necessarily correlated.

[2] R. D. Stevens, <u>Elasticity of Food Consumption Associated with Changes in Incomes in Developing Countries</u>, Foreign Agricultural Economics Report No. 23, ERS, USDA, March 1965.

[3] Income elasticity is the percent change in food consumption with a one percent change in income, other factors held constant.

Population projections provided by CBS suggest SAR population growth at 3.59 percent annually from 1980 to 1990 and at 3.27 percent annually from 1980 to 2000. Thus, based on population change alone, SAR will require an increase of 42.3 percent in the food supply between 1980 and 1990 if only 1980 levels of per capita consumption are maintained. Per capita real income has been projected to increase by 45.0 percent between 1980 and 1990 or a compound annual rate of 3.78 percent. Using these population and income growth rates and hypothetical income elasticities of demand for food of 0.4 and 0.6 results in the following estimates of increased demand for food:

Income elasticity of 0.4:

$$d_1 = 3.59 + 0.4 \ (3.78)$$

$$d_1 = 5.10 \text{ percent per year or a 64.4 percent increase in food}$$
demand between 1980 and 1990 based on population and income growth;

Income elasticity of 0.6:

$$d_2 = 3.59 + 0.6 \ (3.78)$$

$$d_2 = 5.86 \text{ percent per year or a 76.7 percent increase in food}$$
demand between 1980 and 1990 with the higher income elasticity.

In summary, projected population increases alone would require a 42 percent increase in the food supply while the addition of projected real income increases might raise total demand for food from 64 to 76 percent over the nearby 10-year period 1980 to 1990.[1] SAR total agricultural production increased roughly 21 percent or 1.6 percent annually from 1961-65 to 1973-77, a 13-year period.[2] Per capita food production in SAR for 1973-77 was an average of 18 percent below the 1961-65 period. SAR was clearly behind both Lebanon and Turkey in rates of increase in food and agricultural production from the early 1960's to the mid-1970's but possibly ahead of Jordan. Thus, SAR was becoming increasingly dependent on imports if the 1961-65 consumption levels per capita were to be maintained. These rather crude projections of total food demand indicate the importance of both population and income growth. The sensitivity of demand to the value of the income elasticity is also apparent. What is true for the total food demand is also true for the projection of individual food items. The projection of each commodity is dependent on population and income projections and an income elasticity of demand.

Items to be discussed in this section include: (1) base consumption levels, (2) population and income projections, (3) income elasticities, (4) the question of food demand versus food needs, and (5) alternative projected levels of commodity consumption.

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[1]Real income refers to projected consumer disposable incomes adjusted for expected increases in the general price level.

[2]USDA, Indices of Agricultural Production in Africa and the Near East, Statistics Bulletin No. 610, ESCS, July 1978.

1.4.1 Base Consumption Levels

Base consumption levels were determined for 1975 on the basis of
a three-year average (1974-76) for a number of commodities and groups
of commodities, Table 1.23. Alternative base 1975 consumption per capita
levels are those of (a) the assessment team and (b) FAO's latest
projections. The team's and FAO's 1975 consumption per capita estimates
are clearly not the same. SARG definitely needs to develop a consistent
procedure for classifying and estimating the disappearance (assumed
consumption) of foods in Syria. Alternative commodity balance sheets
were available from the Central Bureau of Statistics (CBS), the Ministry
of Agriculture and Agrarian Reform (MAAR), and the Ministry of Supply
and Domestic Trade (MSDT). These balance sheets were presumably prepared
for different purposes and with different results. Further, Consumer
Surveys for 1961/62 and 1971/72 were available from CBS. These sources
as well as judgment were used to develop the team's 1975 consumption estimates
in Table 1.23.

SARG should consider establishing an official commodity balance
table utilizing FAO's recommended procedure.[1] A consistent set of
commodity balance tables would provide SARG with a vital tool useful
for planning production and consumption projections as well as for
assessing the nutritional state of its current food supply and production,
imports, exports, and changes in stocks on the supply side and seed, feed,
wastes, industrial use and extraction rates providing total "consumption"
or disappearance on the demand side. Each of the various balance sheets
mentioned above had strengths and weaknesses but none were sufficiently
comprehensive or precise to be used for all of the 1975 base consumption
levels in Table 1.23. The base consumption levels are not simply the
gross disappearance values but include some adjustments for waste,
processing, etc., e.g., meat data are supposedly in carcass weight. A
consistent comprehensive set of balance tables would greatly facilitate
the estimation of crop and animal product utilization in Syria. The
utilization of feed, industrial, and animal products among by-products
and waste factors are needed.

The base 1975 estimated consumption figures are established roughly
around the 1974-76 period so as to get "normal" use during this period.
Hopefully, this averaging process eliminates any significant change in
stocks between crop years. The team's estimates for 1975 are similar
to those of FAO for most commodities. FAO's latest expenditure elasticities
were used for the projections.

1.4.2 Population and Income Projections

Population and income projections at five year intervals through the
year 2000 were available from the Central Bureau of Statistics (CBS) and
the State Planning Commission in Syria and from the Food and Agriculture

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[1]FAO, "Preparation of Supply/Utilization Balance's for Food and
Agricultural Commodities (Commodity Balances)-Recommendations Regarding
Methods, Concepts, Definitions, and Classifications," Fifth Session of
the Near East Commission on Statistics, Cairo, U.A.R., April 1970, and
a paper by M. Salameh, Food Balance Sheet in Syria, 1969/1971, Preparation
and Evaluation, MSDT, 1973.

Table 1.23 Estimates of Total and Per Capita Consumption of Selected

Food Commodity Items for Syria 1975

Commodities (FAO Nos.)	Asses. Team Estimates		FAO Estimates	
	Total	Per Capita[a]	Total	Per Capita[a]
	(1000 mt)	(kg)	(1000 mt)	(kg)
1. CEREALS	1333.7	179.30	1234	170.0
2. Wheat[b]	1211.0	162.80	1124	154.8
3. Rice paddy[c]	94.0	12.63	94	12.9
4. Maize[d]	17.5	2.35	4	0.6
5. Barley[e]	7.2	0.97	8	1.1
6. Oats	--	---	--	--
7. Millet-Sorghum[c]	4.0	0.53	4	0.6
8. Other Cereals	--	---	--	--
9. ROOTS & TUBERS[c]	103.0	13.84	103	14.2
10. Potatoes	103.0	13.84	103	14.2
11. Sweet Potatoes	--	---	--	--
12. Cassava	--	---	--	--
13. Yams	--	---	--	--
14. Plantains	--	---	--	--
15. Other Roots	--	---	--	--
16. SUGAR PRODUCTS	195.6	26.30	223	30.8
17. Sugar Cent Raw[f]	180.0	24.20	214	29.5
18. Sugar Non-Cent	--	---	--	--
19. Other Sugars[f]	15.6	2.10	9	1.3

Table 1.23 Continued   92

Commodities (FAO Nos.)	Assess. Team Estimates		FAO Estimates	
	Total	Per Capita[a]	Total	Per Capita[a]
	(1000 mt)	(kg)	(1000 mt)	(kg)
20. PULSES-NUTS-SEEDS	181.1	24.21	159	21.9
21. Pulses[b,g]	117.7	15.82	83	11.4
Chick peas[b]	34.7	4.66		
Lentils[g]	66.8	9.00		
Beans[g]	0.6	0.08		
Broad Beans[g]	7.7	1.03		
French Beans[g]	7.9	1.06		
22. Tree Nuts[c]	29.0	3.90	29	4.1
Walnut	16.0	2.15		
Chestnut	0.5	0.07		
Almonds	8.6	1.16		
Pistachio	3.8	0.51		
23. Oil Crops[g,e]				
24. VEGETABLES[g,h]	1478.8	198.80	1201	165.4
25. FRUITS[g]	1350.1	181.50	1266	174.4
26. Orange/tang.	108.7	14.60	104	14.3
27. Lemon/Lime	14.7	2.00	22	3.0
28. Other Citrus	--	--	--	--
29. Banana	27.9	3.70	22	3.0
30. Other Fruits[i]	1198.8	161.20	1118	154.0
Grapes[g,e]	209.1	28.10		
Apples[g]	74.9	10.67		
Apricots[g]	39.9	5.36		

Table 1.23 Continued.

Commodities	Assess. Team Estimates		FAO Estimates	
(FAO Nos.)	Total	Per Capita[a]	Total	Per Capita[a]
	(1000 mt)	(kg)	(1000 mt)	(kg)
Olives[e]	32.3	4.34		
Remainder[g]	842.6	113.28		
31. MEAT & OFFALS	108.4	14.57	118	16.3
32. Beef-Veal[b]	10.0	1.35	20	2.8
33. Mutton-Lamb[b]	66.2	8.90	60	8.3
34. Pigmeat[b]	--	--	--	--
35. Poultry Meat[b]	14.6	1.96	20	2.8
36. Other meat[b]	6.7	0.90	2	0.3
37. Offals[g]	10.9	1.46	15	2.1
38. EGGS[g]	32.7	4.40	29	4.0
39. FISH[g]	11.5	1.55	11	1.6
40. Finfish Fr-Fz	9.4	1.05	6	0.9
41. Finfish Proc.	2.1	0.24	5	0.7
42. Crust-Mollusc	--	--	--	--
43. Other aq. and pl.	--	--	--	--
44. WHOLE MILK[f,j]	198.6	26.70	174	24.0
45. Skim Milk	--	--	46	6.3
46. Cheese	31.2	4.20	38	5.2

Table 1.23 Continued.

Commodities (FAO Nos.)	Assess. Team Estimates		FAO Estimates	
	Total	Per Capita[a]	Total	Per Capita[a]
	(1000 mt)	(kg)	(1000 mt)	(kg)
47. FATS & OILS	79.5	10.7	79	10.9
48. Butter[d,k]	20.0	2.69	13	1.8
49. Vegetable oils[b,e,f]	55.8	7.50	64	8.8
50. Animal oil-fat	3.7	0.50	2	0.3
51. SPICES[c]	3.0	0.40	3	0.5
52. STIMULANTS	6.0	0.81	7	1.0
53. Cocoa Beans	1.0	0.13	1	0.1
54. Coffee[b]	1.3	0.17	2	0.3
55. Tea[b]	3.7	0.50	4	0.6
56. Other Stimulants	--	--	--	--
57. MISC. FOOD	--	--	--	--
58. ALCOHOLIC BEV.	8.0	1.07	12	1.6
59. Wine	1.0	0.13	1	--
60. Beer	4.0	0.54	7	1.0
61. Other	3.0	0.40	4	0.6
62. NON-ALCOHOLIC BEV.	--	--	--	--

Table 1.23 Continued.   95

Notes and Sources:

a. Differences in per capita data due to FAO's 1975 population as 7,259,000 and SARG reported as 7,438,000.

b. Salameh data adjusted to 1975.

c. FAO estimates forthcoming in next projections publication.

d. Average of Salameh and Farra estimates.

e. CBS Balance Table 1971 - 1976.

f. CBS Consumer Survey 1971 - 1977.

g. Farra MSIT Balance Sheets.

h. Vegetables include tomatoes, squash, onions, eggplants, cauliflower, cucumber, okra, garlic, green beans, green broad beans, and "other vegetables".

i. Other fruits include: grapes, apricots, apples, peaches, pears, plums, cherries, olives, watermelons, raisins, figs and dates, and pomegranate.

j. Milk and yogurt.

k. Butter and animal ghee.

1. Oil crops and peanuts, sesame, sunflower.

Sources available for computing the estimated average price per capita consumption level included balance sheets from CBS, the Farra 1975-77 balance sheet and the M. Salameh 1969-71 balance sheet from Consumer Household Survey from CBS; other sources were not consistent in terms of estimating consumption or disappearance each year. (The use of FAO balance sheet methods has been attempted in SAR but not perfected in terms of consistent commodity and/or products classification.)

Organization (FAO) of the United Nations. FAO will issue their latest set of agricultural commodity projections for Syria through the year 2000 during 1979.[1]

1.4.2.1 Population Projections

The latest CBS population projections show a very high rate of growth over the 1975 to 2000 period, i.e., 3.38 percent compound annually, Table 1.24 and 1.25. Projected rates of growth earlier in the 25 period are even higher; e.g., 3.59 percent between 1980 and 1990. Previous SARG and FAO projections were more modest, 3.16 percent growth annually for FAO and only 2.89 percent for SPC projection to 2000. Syria's population may well grow at the projected 3.59 percent between 1980 and 1990. Previous SARG and FAO projections were more modest, 3.16 percent growth annually for FAO and only 2.89 percent for SPC projection to 2000. Syria's population may well grow at the projected 3.382 percent annually between 1975 and 2000 (or 3.269 percent 1980-2000) yielding a population of 17,085,000 by the year 2000. Only the recent CBS population projections are used here. Alternative population projections may be utilized with the projected per capita consumption levels as desired. The recent CBS high growth projections have population increasing by 129 percent between 1975 and 2000 (Table 1.25).

1.4.2.2 Income Projections

Population projections are the most certain of the three elements used in projecting commodity demand, i.e., (1) population, (2) expenditures, and (3) income elasticities. Expenditure projections are probably the most difficult to project accurately. Projected per capita consumption expenditures used herein were from two sources: the State Planning Commission and FAO, Table 1.26. Per capita consumption expenditures rather than per capita gross domestic product figures are necessary because the FAO elasticities used herein are for expenditures. These per capita consumption expenditures provide a range of 50 percent for 1985 and 34 percent for the year 2000 projections.

1.4.3 Income Elasticities

Income elasticities, or expenditure elasticities where total per capita expenditures are used in lieu of income as is the case here, presumably reflect the changes in consumer buying habits as real incomes increase. Wheat, for example, may have an expenditure consumption elasticity of 0.2 while mutton's is 0.9. This implies that wheat consumption will increase only 0.2 percent if total expenditures increase one percent

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[1]FAO published consumption and production projections to 1970 and 1980 in 1962 and 1970, respectively. FAO's latest set of projections will extend to 2000.

Table 1.24

Population Data for Syria; Base 1975

and Projected 1985 and 2000

Period	Year	Population Level New CBS[a]
		(1000)
Base	1975	7,438
Projected	1980	8,979
	1985	10,781
	1990	12,774
	1995	14,922
	2000	17,085

[a]Source: Central Bureau of Statistics

Table 1.25

Annual Compound Rates of Change and Periodic

Changes, Percentages, 1975-2000, from SAR

Population Projections

| Base Year | Annual rates of change with periodic change in parentheses | | | |
| | Ending Year | | | |
	1980	1985	1990	2000
		(Percentage)		
1975	3.834 (20.7)	3.778 (44.9)	3.669 (71.7)	3.382 (129.7)
1980		3.731 (20.1)	3.590 (42.3)	3.269 (90.3)
1985			3.453 (18.5)	3.118 (58.5)
1990				2.946 (33.7)

Source: Based on CBS population projections current as of March 1979.

Table 1.26

Alternative Per Capita Consumption Expenditure Levels for

Syria: base 1975 and projected 2000

Period	Year	Per Capita Consumption Expenditure Levels	
		A. FAO[a] derived	B. SPC[b] derived
		(S.P.	Per Capita)
Base	1975	1677 (430)	1980 (508)
Projected	1985	2160 (554)[c]	3219 (825)
	2000	3584 (919)	4810 (1233)

[a]FAO total consumption expenditures for Syria divided by new CBS I population projections, Table 1.24.

[b]State Planning Commission projected total consumption divided by new CBS I population projections, Table 24.

[c]U.S. dollars in parentheses.

while mutton consumption will increase by 0.9 percent. People prefer mutton to wheat or bread as incomes increase. As incomes rise above the subsistence level, populations generally consumer fewer cereals and starchy items and more meat, milk, dairy products, and eggs.

The expenditure elasticities used here are the most recent used by FAO for Syria. They have been derived through FAO's experience with food demand-expenditure relationships for countries throughout the world.[1] FAO's elasticities are based at 1975 and are the latest available.

Both expenditure and consumption income elasticities have been calculated for selected SAR food products by CBS.[2] These estimates were derived from differences in expenditures and consumption as well as total expenditures between 1961 and 1971 based on household consumption surveys conducted by CBS. This type of work should be encouraged as it would be useful for future projection studies. A State Planning Commission study published in April 1970 projected demand for food items to 1985 and compared these with similar projections by the Ministry of Supply and Domestic Trade and Ministry of Agriculture and Agrarian Reform. Unfortunately, the team discovered this report only a week prior to departure. Other such studies may be available but were not brought to the team's attention. It appears that the expenditure elasticities from the earlier CBS report were not from cross sectional household survey data but rather from the differences in total expenditures between 1961 and 1971. If so, those conducting the surveys should be encouraged to collect data by family size, expenditure level, education, place of residence, and other relevant factors so that the relationship between expenditure level and consumption level can be estimated, yielding expenditure elasticities specifically for Syria.[3]

The necessity for reliable income or expenditure elasticities for planning is readily apparent. Over time the mix of food items consumed in Syria has changed due to changes in buying power and tastes, Table 1.27. The best method of anticipating future changes in demand would be to use income or expenditure elasticities derived directly from SAR consumer data. FAO elasticities used here (see Appendix 1.B) were presumably interpolated from consumer behavior in similar countries rather than derived from SAR data.

1.4.4 Food Demand vs. Food Needs

The projections for various food items assume that supply is perfectly elastic or that prices are constant relative to the 1975 base. The resulting quantities are those which consumers would be expected to buy with higher real incomes and full availability of the commodity at a constant price. However, if most food items are produced and supplied at the direction of the government, then consumers are not presented many choices outside of

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[1] See FAO, Income Elasticities of Demand for Agricultural Products, CCP 72/WP.1, May 1972, Rome, as well as Volumes I and II of FAO's Agricultural Commdity Projections Reports.

[2] CBS, Expenditure and Consumption Elasticities for Cities, Rural Areas and Total, December 1978.

[3] A useful reference is L. Philips, Applied Consumption Analysis, North Holland Publishing Co., Amsterdam, 1974. This book also contains many useful references on the topic of consumption analysis.

Table 1.27

Consumption and expenditures, average Per Capita, by Selected Food Items, 1961/62 and 1971/72

Food Category	1961/2		1971/2		Implied Prices[a]	
	avg. exp. per capita	avg. cons. per capita	avg. exp. per capita	avg. cons. per capita	1961/2	1971/2
	(LS)	(kg)	(LS)	(kg)	(piasters/kilo)	
Bread	20.09	61.7	23.16	63.7	32.56	36.35
Flour	6.20	38.5	28.70	71.1	16.10	40.36
Burgoal	12.40	26.5	9.05	16.5	46.79	54.84
Rice	9.41	14.3	10.93	13.5	65.80	80.96
Meats	34.68	9.20	49.58	8.50	376.95	583.29
Poultry	2.00	0.81	4.90	1.8	246.91	272.22
Eggs (No.)	3.95	40.43	6.82	41.40	9.76	16.47
Olive oil	11.52	4.56	17.28	4.10	252.63	421.46
Sugar	14.43	16.44	21.35	24.20	87.77	88.22
Fresh milk	5.12	10.33	7.33	11.40	49.56	64.29
Tomato	7.21	26.90	10.43	36.40	26.80	28.65
Potato	5.20	14.66	7.64	16.80	35.47	45.47
Citrus	3.95	9.23	7.27	11.70	42.79	62.14

[a] Expenditures divided by consumption.

Source: CBS, Analysis and Data for Consumer Survey 1971-72, 1978, pp. 26-27.

the government plan. That is, if SARG chooses to restrict the
entry of some commodities or certain varieties of commodities, then
consumer choices are limited by this policy. The point is that
incorporating the behavioral elasticities in the projection process
as done here assumes the projected commodities are readily available.
Such may not be the case, for example, if state policy restricts
one commodity at the expense of another. Thus, "planning" for certain
levels of consumption should be distinguished from attempting to project
what the population would be expected to consume given readily available
foodstuffs and higher real incomes. The projections in the following
section are of the latter type, i.e., what would be expected to be
consumed if available based on usual consumption trends as real incomes
increase.

1.4.5 Commodity Demand Projections

1.4.5.1 Food and Beverages

Projection alternatives I, II, and III differ only by the assumed
expenditure per capita levels while the projected rate of population
growth used for all three is the same, Table 1.28.
Alternative I uses SARG projected consumption expenditures but on a
per capita basis from the most recent CBS population projections. Alternative I
provides the highest per capita expenditures levels. Alternative II
employs FAO's total private consumption expenditures divided by the recent
CBS projected population data. Alternative II expenditures are modest and
would give rather conservative projected values as regards the income effect.
Alternative III is projecting by simply multiplying the 1975 base
consumption levels by the high level population projections with no
income effect, i.e., income is assumed to remain constant at the 1975
level. The differences between Alternative III and Alternatives I and II
reveal the effects of assumed alternative income levels.
The elasticities and the respective functional forms assumed for each
food's per capita consumption function are presented in Appendix 1.B.
Projections are from 1975 to (a) 1985 and (b) 2000 because 1975
was the base year for the elasticities.
The projected kilograms per capita and total metric tons figures are
in Table 1.29. Compound annual growth rates and interval percentage
changes from 1975 to 1985 and 2000 are shown in Table 1.30. A form of
1980 to 1985 percentage change was derived by using the 1975-1985 annual
growth rate, Table 1.30.[1] The projected increases for total consumer
demand by food groups are all over 20 percent between 1980 and 1985.
Fruits, sugar products, meats, eggs, milk, and fish are the leading
gainers in terms of projected consumer demand. Again, these differing
rates of growth among commodities are based wholly on the expenditure
elasticities and trend adjustments shown in Appendix 1.B.
Consumer demand more than doubles for all items between 1975 and
2000 for the Alternative II projections. Recall that these price projections

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[1]Projections are based on 1975 but a type of projection from 1980
to 1985 can be derived using the annual compound rates of growth in Table 30.

Table 1.28

Population and Expenditure Assumptions

with High Population Growth for Alternative

Demand Projections to 1985 and 2000

Alternatives[a]	Base 1975	Projected 1985	2000
Alternative I:			
a. Expenditure per capita:			
SARG LS[b]	1980	3219	4810
$	508	825	1233
b. Population million SARG	7,438	10,781	17,085
Alternative II:			
a. Expenditure per capita			
FAO LS	1677	2160	3584
$	430	554	919
b. Population million SARG	7,438	10,781	17,085
Alternative III:			
a. Expenditure per capita			
SARG LS	1979	no change	
$	507	from 1975	
b. Population million SARG	7,438	10,781	17,085

[a]Population data are the same for all alternatives. SARG
expenditure projections are used in Alternative I. FAO
expenditure projections are used with SARG population in
Alternative II, yielding lower per capita expenditures than
Alternative I or the expenditures used in FAO's table.

[b]Syrian pounds or lira divided by 3.9 to get dollars U.S.

Table 1.29 Projections to 1985 and 2000 With Alternative Income Assumption, Per Capita, and Totals, Base 1975

Commodity and Projection[a]		Base Year 1975		Projected			
				1985		2000	
		(kg)	(1000 mt)	(kg)	(1000 mt)	(kg)	(1000 mt)
Wheat	I	162.80	1211.0	158.8	1,712	135.5	2,316
	II	---	---	165.9	1,788	148.6	2,539
	III	---	---	162.8	1,755	162.8	2,781
Rice	I	12.63	94.0	15.08	163	17.11	292
	II	---	---	13.91	150	16.46	281
	III	---	---	12.63	136	12.63	216
Maize	I	2.35	17.5	2.47	27	2.56	44
	II	---	---	2.41	26	2.53	43
	III	---	---	2.35	25	2.35	40
Barley	I	0.97	7.2	0.82	9	0.75	13
	II	---	---	0.82	9	0.75	13
	III	---	---	0.97	10	0.97	17
Millet/ Sorghum	I	0.53	4.0	0.53	6	0.53	9
	II	0.53	4.0	0.53	6	0.53	9
	III	0.53	4.0	0.53	6	0.53	9
CEREALS	I	179.30	1333.7	177.81	1,917	156.45	2,674
	II	---	---	183.56	1,979	168.70	2,882
	III	---	---	179.30	1,932	179.30	3,063
POTATOES	I	13.84	103.0	15.86	171	17.52	299
	II	---	---	14.89	161	61.99	290
	III	---	---	13.84	149	13.84	236
Sugar – cent raw	I	24.20	180.0	29.35	316	34.06	581
	II	---	---	27.25	294	32.58	557
	III	---	---	24.20	261	24.20	513
Other Sugar	I	2.10	15.6	2.81	30	3.41	58
	II	---	---	2.47	27	3.21	55
	III	---	---	2.10	23	2.10	36
SUGAR PRODUCTS	I	26.3	195.6	32.16	346	37.47	639
	II	---	---	29.72	321	35.79	612
	III	---	---	26.30	284	26.30	449

Table 1.29 Continued.

Commodity and Projection[a]		Base Year 1975		Projected			
				1985		2000	
		(kg)	(1000 mt)	(kg)	(1000 mt)	(kg)	(1000 mt)
Pulses	I	15.82	117.7	16.95	183	16.61	284
	II	---	---	15.62	168	15.86	271
	III	---	---	15.82	170	15.82	270
Tree Nuts	I	3.90	29.0	5.04	54	5.99	102
	II	---	---	4.49	48	5.67	97
	III	---	---	3.90	42	3.90	67
Oil Crops	I	4.49	33.4	5.58	60	6.49	111
	II	---	---	5.05	55	6.19	106
	III	---	---	4.49	48	4.49	77
PULSES NUTS SEEDS	I	24.21	181.1	27.57	297	29.09	497
	II	---	---	25.16	271	27.74	474
	III	---	---	24.21	260	24.21	414
VEGETABLES[b]	I	198.8	1478.8	240.9	2,597	266.7	4,557
	II	---	---	222.3	2,397	259.4	4,432
	III	---	---	198.8	2,143	198.8	3,396
Oranges/tang.	I	14.6	108.7	24.86	268	24.60	420
	II	---	---	21.54	232	22.72	388
	III	---	---	14.60	157	14.60	249
Lemon/Lime	I	2.0	14.7	2.23	24	2.26	38
	II	---	---	2.07	22	2.19	37
	III	---	---	2.00	22	2.00	34
Bananas	I	3.7	27.9	4.42	48	5.01	86
	II	---	---	4.07	44	4.82	82
	III	---	---	3.70	40	3.70	63
Other Fruits	I	161.2	1198.8	187.98	2,027	203.94	3,484
	II	---	---	176.30	1,901	199.40	3,407
	III	---	---	161.20	1,738	161.20	2,754
FRUITS	I	181.50	1350.1	219.49	2,366	235.81	4,029
	II	---	---	203.97	2,199	229.13	3,914
	III	---	---	181.50	1,957	181.50	3,100

Table 1.29 Continued

Commodity and Projection[a]		Base Year 1975		Projected			
				1985		2000	
		(kg)	(1000 mt)	(kg)	(1000 mt)	(kg)	(1000 mt)
Beef/Veal	I	1.35	10.02	2.42	26	3.91	67
	II	---	---	1.83	20	3.36	57
	III	---	---	1.35	16	1.35	23
Mutton/Lamb	I	8.90	66.21	12.80	138	15.00	256
	II	---	---	10.92	118	13.80	236
	III	---	---	8.90	96	8.90	152
Poultry Meat	I	1.96	14.60	4.48	48	7.15	122
	II	---	---	3.13	34	5.90	101
	III	---	---	1.96	21	1.96	33
Other Meats	I	0.90	6.70	1.20	13	1.53	26
	II	---	---	1.05	11	1.42	24
	III	---	---	0.90	10	0.90	15
Offals	I	1.46	10.90	1.95	21	2.48	42
	II	---	---	1.70	18	2.30	39
	III	---	---	1.46	16	1.46	25
MEATS	I	14.57	108.43	22.85	246	30.07	513
	II	---	---	18.64	201	26.78	457
	III	---	---	14.57	159	14.57	248
EGGS	I	4.40	32.70	7.87	85	10.80	185
	II	---	---	5.96	64	9.26	158
	III	---	---	4.40	47	4.40	75
Finfish F_r-F_2	I	1.26	9.40	1.95	21	2.81	48
	II	---	---	1.59	17	2.52	43
	III	---	---	1.26	14	1.26	22
Finfish Proc.	I	0.28	2.10	0.48	5	0.74	13
	II	---	---	0.37	4	0.65	11
	III	---	---	0.28	3	0.28	5
FISH	I	1.55	11.50	2.43	26	3.55	61
	II	---	---	1.96	21	3.15	54
	III	---	---	1.55	17	1.55	27

Table 1.29 Continued

Commodity and Projection[a]		Base Year 1975		Projected			
		(kg)	(1000 mt)	1985 (kg)	(1000 mt)	2000 (kg)	(1000 mt)
WHOLE MILK	I	26.70	198.60	39.70	428	50.43	862
	II	---	---	33.46	361	46.98	803
	III	---	---	26.70	288	26.70	456
CHEESE	I	4.20	31.20	6.19	67	8.54	146
	II	---	---	5.14	55	7.71	132
	III	---	---	4.20	45	4.20	72
Butter	I	2.69	20.00	3.43	37	4.19	72
	II	---	---	3.05	33	3.93	67
	III	---	---	2.69	29	2.69	46
Vegetable Oils	I	7.50	55.80	8.75	94	10.92	187
	II	---	---	8.20	88	10.45	179
	III	---	---	7.50	81	7.50	128
Animal oil-fat	I	0.50	3.70	0.61	7	0.71	12
	II	---	---	0.55	6	0.68	12
	III	---	---	0.50	5	0.50	9
FATS & OILS	I	10.69	79.50	12.79	138	15.82	270
	II	---	---	11.80	127	15.10	258
	III	---	---	10.69	115	10.69	183
SPICES	I	0.40	3.00	0.52	6	0.61	10
	II	---	---	0.46	5	0.58	10
	III	---	---	0.40	4	0.40	7
Cocoa Beans	I	0.13	1.00	0.19	2	0.24	4
	II	---	---	0.16	2	0.23	4
	III	---	---	0.13	1	0.13	2
Coffee	I	0.17	1.30	0.21	2	0.25	4
	II	0.17	1.30	0.19	2	0.23	4
	III	---	---	0.17	2	0.17	3

Table 1.29 Continued

Commodity and Projection[a]		Base Year 1975		Projected			
				1985		2000	
		(kg)	(1000 mt)	(kg)	(1000 mt)	(kg)	(1000 mt)
Tea	I	0.50	3.70	0.58	6	0.70	12
	II	0.50	3.70	0.53	6	0.66	11
	III	---	---	0.50	5	0.50	9
STIMULANTS	I	0.81	6.00	0.98	11	1.19	20
	II	---	---	0.88	10	1.12	19
	III	---	---	0.81	8	0.81	14
Wine	I	0.13	1.00	0.21	2	0.27	5
	II	---	---	0.17	2	0.23	4
	III	---	---	0.13	1	0.13	2
Beer	I	0.54	4.00	0.80	9	1.02	17
	II	0.54	4.00	0.68	7	0.95	16
	III	---	---	0.54	6	0.54	9
Other Alcohol Beverage	I	0.40	3.00	0.59	6	0.76	13
	II	---	---	0.50	5	0.70	12
	III	---	---	0.40	4	0.40	7
ALCOHOLIC BEVERAGE	I	1.07	8.00	1.60	17	2.05	35
	II	---	---	1.35	14	1.87	32
	III	---	---	1.02	11	1.07	18

Notes:

[a]Alternative projections are: I. SARG income and population projections and FAO income elasticity and trends; II. FAO income and SARG population and FAO income elasticity and trends; and III. SARG population multiplied by base year levels to show effects of population increase only.

Rounding errors occur for those items with small consumption levels; e.g., spices, due to rounding total consumption to 1000 metric tons.

[b]Vegetable consumption allows for about 10 percent waste.

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Table 1.30

Annual rates of increase and interval changes in percentages, by

commodity groups, Alternative II Projections, 1978 to 1985 and 2000[a]

Commodity Group	1975–1985		1980–85	1975–2000	
	Annual Rate	Interval Change	Interval Change	Annual Rate	Interval Change
	(Percent)				
Cereals	4.02	48.4	21.8	3.13	116.1
Potatoes	4.57	56.3	25.0	4.22	181.5
Sugar Products	5.08	64.1	28.1	4.90	230.8
Pulses/nuts/oilseeds	4.11	49.6	22.3	3.92	161.7
Vegetables	4.90	62.1	27.0	4.49	199.7
Fruits	4.99	62.8	27.6	4.35	189.9
Meats	6.36	85.2	36.1	5.92	321.1
Poultry	8.82	132.8	52.6	8.04	591.7
Eggs	6.94	95.7	39.9	6.50	383.2
Fish	6.20	82.6	35.1	6.38	369.5
Whole Milk	6.16	81.8	34.8	5.74	303.3
Cheese	5.83	76.3	32.7	5.94	323.1
Fats & Oils	4.79	59.7	26.4	4.82	224.5
Spices	5.24	66.7	29.1	4.93	233.3
Stimulants	5.24	66.7	29.1	4.72	216.6
Alcohol Beverage	5.75	75.0	32.2	5.70	300.0

[a]Based on Alternative II projections, Table 1.28.

are based on rather modest income growth rates. Total consumption for
the high income level I projections is clearly higher than for the more
moderate level II projections, Table 1.29. However, the difference is
not as much as might be expected because of the rapid decline in wheat
consumption at the higher income levels, Table 1.29.

Thus, if SARG is to satisfy apparent consumer demands in 1985 it
will have to see that two-thirds or more of the 1975 total consumption
of most food items are available by 1985. Of course, these are foods
which require more intensive production programs and inputs. The task
increases considerably by 2000 when two to almost three times as much
food tonnage would be consumed, if available, with moderate to high
income growth. Note that population increase alone accounted for 85 to
90 percent of the increased demand by 1985 and 80 percent by 2000.

These high population consumption projections will take on greater
perspective when compared with recent and expected production trends.
Of course, the 640,000 irrigated hectares from the Eurphrates dam will
add considerable supply in support of the rapidly growing Syrian population
and attendant economic demand for more and better foods.

Population alone will be the major demand shifter. It seems inevitable
that population will at least double between 1975 and 2000 requiring twice
the total food consumed in 1975. Compounding the effect of increased
population will be increased buying power demanding more and different
types of foods. Demand driven by growth in both population and income
increases for foods and food groups by two- to four-fold or more by
2000, Tables 1.29 and 1.31.

The demand projections must be converted back to hectarages and
yields to determine the resources needed by 1985 and 2000 to meet such
needs. Again, however, note we are discussing projected consumer demand
with assumed adequate supplies at constant prices. If supplies are short
of projected demand, prices would rise to ration what is available.
Further, government plan may limit the availability of some items and
promote others so that consumption must adjust accordingly.

1.4.5.2 Industrial Crops

Cotton, tobacco, sugar, and vegetable oils are classified as
industrial crops and were discussed in Section 1.2 in terms of recent
trends. Projected outlook for these crops depends on both world and
Syrian situations. SARG policies will affect production, exports, imports,
and consumption of these items.

It is important to realize that Syria is a very minor exporter, importer
and/or user of each of these crops due simply to population size; roughly
nine million people in 1980. As such, Syria will not significantly
influence world markets with its supply or purchase activities of these
commodities. Syria will import and export at world prices while having
little or no influence on world prices.

1.4.5.2.1 Cotton

Cotton is clearly the major export crop for Syria but is a minor
share of world cotton exports. Syria was the seventh largest exporter
of cotton during the 1975-1977 period but accounted for only 3 percent
of total world exports. World exports change by more annually that the

Table 1.31 Total Consumption Levels for Major Food Groups, Base Year and

Projected 1985 and 2000, Alternatives I, II, III

Food Group		Base 1975 1000 MT	Base 1975 Percent of Base	1985 1000 MT	1985 Percent of Base	2000 1000 MT	2000 Percent of Base
Cereals	I	1333.7	100.0	1917	143.7	2674	200.5
	II	---	---	1979	148.4	2882	216.1
	III	---	---	1932	144.9	3063	229.7
Potatoes	I	103.0	100.0	171	166.0	299	290.3
	II	---	---	161	156.3	290	281.5
	III	---	---	149	144.7	236	229.1
Sugar	I	195.6	100.0	346	176.9	639	326.7
Products	II	---	---	321	164.1	612	312.9
	III	---	---	284	145.2	449	229.5
Pulses	I	181.1	100.0	297	164.0	497	274.4
Nuts	II	---	---	271	149.6	474	261.7
Oilseeds	III	---	---	260	143.6	414	228.6
Vegetables	I	1478.8	100.0	2597	175.6	4557	308.2
	II	---	---	2397	162.1	4432	299.7
	III	---	---	2143	144.9	3396	229.6
Fruits	I	1350.1	100.0	2366	175.2	4029	298.4
	II	---	---	2199	162.8	3914	289.9
	III	---	---	1957	144.9	3100	229.6
Meats	I	108.4	100.0	246	226.9	513	473.2
	II	---	---	201	185.4	457	421.6
	III	---	---	159	146.7	248	228.8
Eggs	I	32.7	100.0	85	259.9	185	565.7
	II	---	---	64	195.7	158	483.2
	III	---	---	47	143.7	75	229.3
Fish	I	11.5	100.0	26	226.1	61	530.4
	II	---	---	21	182.6	54	496.6
	III	---	---	17	147.8	27	234.7
Whole	I	198.6	100.0	428	215.5	862	434.0
Milk	II	---	---	361	181.8	803	404.3
	III	---	---	288	145.0	456	229.6

Table 1.31 Continued   112

Food Group		Base 1975		1985		2000	
		1000 MT	Percent of Base	1000 MT	Percent of Base	1000 MT	Percent of Base
Cheese	I	31.2	100.0	67	214.7	146	467.9
	II	---	---	55	176.3	132	423.1
	III	---	---	45	144.2	72	230.7
Fats and Oils	I	79.5	100.0	138	173.6	270	339.6
	II	---	---	127	159.7	258	324.5
	III	---	---	115	144.6	183	230.2
Spices	I	3.0	100.0	6	200.0	10	333.3
	II	---	---	5	166.6	10	333.3
	III	---	---	4	133.3	7	233.3
Stimulants	I	6.0	100.0	11	183.3	20	333.3
	II	---	---	10	166.6	19	316.6
	III	---	---	8	133.3	14	233.3
Alcoholic Beverage	I	8.0	100.0	17	212.5	35	437.5
	II	---	---	14	175.0	32	400.0
	III	---	---	11	137.5	18	225.0
Total	I	5108.6 (686.8 kg/capita)	100.0	8718 (808.6 kg/capita)	170.6	14,797 (866.1 kg/capita)	289.6
excluding stimulants & alcohol	II	---	---	8,186 (759.3 kg/capita)	160.2	14,527 (850.3 kg/capita)	284.4
	III	---	---	7,404 (both 686.8 kg/capita)	144.9	11,734	229.7

Source: Table 1.29.

whole of Syria's exports.[1] Even though all cotton is not homogeneous and Syrian cotton enjoys an excellent reputation in world markets, Syria should not have any influence on world prices due to its small share of the market.

FAO sees world cotton trade expanding modestly with relative increases in demand greatest in the Near East. Since SARG policy appears to be to stabilize or reduce cotton production in favor of food crops and increase domestic mill consumption of cotton, SAR cotton exports will probably not increase during the foreseable future. Over 40 percent of Syria's exports were to China (P.R.) and the USSR during the 1975-1977. This concentration of sales to state controlled markets could be good or bad depending on the policies of those countries. Fortunately, the other 60 percent is well spread over a number of markets.

FAO projects world cotton demand to increase by 27 percent between 1972-74 and 1985; 41 percent in developing countries and 16 percent in developed countries.[2]

1.4.5.2.2 Sugar

Imports were 84 percent of Syria's sugar consumption during 1975-1977.[3] Syria's imports were less than one percent of world sugar imports (0.73 percent). Syria's sugar importing activities are not likely to affect world supply and demand conditions. Future import needs of Syria depend on SARG policy regarding domestic sugar beet production and consumer sugar rationing and subsidies. FAO projects world sugar production increasing more rapidly than world demand to 1985. Thus, supplies for Syria's imports should be adqueate. Near East import requirements were projected to increase by 58 percent between 1976 and 1985, still supplies should be sufficient for Syrian imports at reasonable prices.

1.4.5.2.3 Tobacco

Syrian tobacco imports and exports are minuscule in terms of world trade. The SARG tobacco monopoly is tightly run and its policies have a great influence on domestic production and trade. World demand for tobacco is still growing but at a reduced rate due to higher prices because of increased costs and taxation and intensified anti-smoking campaigns. Depending on the permanence of the barter arrangement with U.S. tobacco companies, the Syrian tobacco monopoly should find adequately increasing demand for its products in the rapidly growing domestic population.

Other industrial commodities such as cottonseed oil or groundnuts will face international markets dominated by world supply and demand forces which Syria is unable to influence. These other commodity situations, as well as cotton, sugar, and tobacco, must be examined in detail for the uniqueness of Syria's needs and Syria's ability to supply.

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[1] International Cotton Advisory Committee, Cotton-World Statistics, Vol. 32, No. 9, Part II, Washington, D.C., April 1979.

[2] FAO Commodity Projections, Cotton; Supply, Demand and Trade Projections, 1985, ESC:PROJ/79/18, February 1979.

[3] International Sugar Organization, Statistical Bulletin, Vol. 37, No. 10/11, Oct/Nov. 1978, London.

Recent work by FAO on supply/demand balance sheets by countries should be published later this year. Unpublished preliminary projections by FAO find SAR self-sufficiency ratios in 1975 and projected 2000 follows:

	Self-Sufficiency Ratios	
	1975	2000
Cereals	0.89	0.43
Wheat	0.88	0.66
Potatoes	0.93	1.00
Sugar	0.12	0.20
Vegetables	0.97	1.01
Fruits	0.98	0.98
Cotton	3.73	3.49
Milk	0.89	0.80
Eggs	0.90	1.00
Meats	0.88	0.97
Coarse Grains	1.00	0.30

For all agricultural commodities, excluding cotton, the combined FAO self-sufficiency ratio dropped from 89 percent in 1975 to projected 76 percent in 2000. The projections suggest less self-sufficiency in cereals and coarse grains, continuing self-sufficiency in potatoes, vegetables, and fruits, and increased self-sufficiency in meats. The coarse grain drawdown would be for feed use to boost meat (mutton, poultry, and beef) production. FAO's projections assumed a population growth rate of 3.16 percent annually versus the SARG 3.38 percent used here for Alternative I projections.

These preliminary FAO projections support our general assessment that Syria will probably become increasingly dependent in terms of total food supply due to the shift to meats and the press of exceptional population growth.

In summary, projected food demands for Syria driven by income and, particularly, projected population are large. Summing the total projected demand for food groups in Table 1.29, excluding Spices, Stimulants, and Alcoholic Beverages, projected total demand was 60 percent greater in 1985 than in 1975 and, 185 percent greater for 2000. Most of the 2000 projected increase, 129 percent, was due to projected population increase with the remainder due to expected increases in real buying power.

1.5 Recommendations

SARG policy is clearly providing stable prices and markets for major crops for those producers who choose to deliver their crops. In the case of some major crops--wheat, barley, and lentils--participation has frequently been low. The general policy of higher farm prices and moderate consumer food prices may be resulting in increased subsidy costs and inflationary pressures as well as reduced foreign exchange earnings, all of which are contrary to stated SARG policy.

Economic planning to the degree attempted by SARG clearly requires large volume of data as well as careful analyses of these data. The team's impression was there there may be considerable data available among the various ministries and general organizations but no central analytical staff to evaluate the data was apparent. The State Planning Commission seemed to be fully occupied with planning, thus having little or no time for compilation and analysis of data, programs, and other information. We recommend that a modest size staff of economic analysts be assembled in one location with the full-time mission of evaluating current and proposed programs in terms of production, prices, consumption, trade, carryover stocks, program costs (including subsidies) and benefits, program participation by producers and consumers, and income levels and distribution. While evaluation of programs would be a major responsibility, the staff group might also propose and evaluate programs given certain objectives. However, this staff should primarily be an objective analytical group rather than being advocates of any particular policy.

Specific tasks for the above staff should include: (1) estimating losses of sales due to smuggling associated with price differentials among Syria, Lebanon, Jordan, and Turkey, (2) determining the amount of bread wasted due the extremely low price (some feed livestock), and 3) determining costs of current agricultural production and marketing programs in terms of both direct subsidies and operating subsidies on a crop by crop basis.

Another major data project which would be very useful for planning purposes is a consistent set of commodity balance tables. These tables can be based on the UN's FAO balance table method which attempts to (1) determine annual supply and (2) partition supply among various uses, waste, and carryover stocks. Three sets of balance tables were found by the team; one each in MAAR, MSIT, and CBS. Each set was significantly different from the other two. A consistent set of balance tables will also be valuable for assessing average nutritional levels. This activity might be located within the MSIT because of their responsibility for projecting annual consumption needs and the resident expertise.

In addition to the abovementioned balance tables, specific information from household surveys would be useful for determining detailed consumption patterns and income or consumption elasticities. Specific income elasticities for SAR should provide (1) greater insight into changing consumption patterns and (2) better demand projections. Household consumption surveys were conducted in 1961/62 and 1971/72, providing useful data. However, the next survey should determine rates of consumption over families of different income levels so that expenditures and/or income elasticities can be developed. At present, demand projections for Syria incorporate FAO expenditure elascities since no domestic elasticities were readily available for all of the desired commodities.

As indicated earlier, considerable data on agriculture were available among the various state agencies but a valuable contribution could be made by compiling these data in the Annual Agricultural Statistical Abstract. Such a publication would contain all available price, production, utilization, trade, etc. data on agriculture rather than only the production and land use data in the recent 1976 agricultural abstract. Much of the agricultural related data in the CBS annual Statistical Abstract should be included in the agricultural data in one publication and illuminate any gaps therein.

A major thesis of this assessment is that SARG may be too involved in both the production and marketing phases of marketing, stifling efficiency and investment. Thus, we recommend the following operational items.

First, utilize price supports (rather than fixed prices) selectively to allocate production and support farmers' incomes. Price supports are beneficial proportionate to the farm size. Since most farmers have very little to sell, price supports would not appear to be particularly beneficial as income support. In any event price supports will allow prices to rise more for those products in greatest demand and/or shortest supply. Of course, price floors must not be set so high that surpluses occur frequently. This "flexibility above the price support level" approach will aid in both production and consumption allocation.

Second, commodity production should be relatively free to move within Syria's boundaries so as to determine the most efficient pattern of production.

Third, concern about exploitive middlemen may be well founded. The decision that the state should dominate the agricultural marketing sector is probably not. Better ways of promoting competitive and efficient marketing could include modest state purchase and storage activities to keep prices reasonable and provision of adequate market information on prices and supplies for both producers and consumers. Newspapers would be useful information outlets. The Commodity Marketing System section treats this matter in more detail.

The sugar program needs a thorough examination in terms of the costs of producing sugar domestically versus importing. Currently, imported sugar is cheaper than that produced in SAR. FAO projections to 1985 indicate plentiful world supplies and reasonable prices.

If SARG planners continue to pursue the marketing of vegetables in meat (in Damascus), the operational personnel need to be given greater authority to adjust prices in accordance with cost and demand factors.

In a sense, one could argue that government programs have created a degree of uncertainty which has prevented the capital investment necessary for increasing productivity. While price stability has been beneficial, the small units created through land reform cannot adopt much in the way of yield increasing technology. Poultry production units, which require some size in order to be efficient, have apparently been restrained by threat of nationalization. Modern poultry operations have been much slower to develop than in Lebanon, for example. SARG needs to determine how important size of production unit is for increasing production and then encourage such scale of enterprise. These would presumably be modest size units but not necessarily the extremely small ones currently dominating agriculture in SAR. The cooperatives are supposedly an answer to the scale or size problem; i.e., cooperative marketing assembles volumes for more efficient handling from a larger number of small production units. How well is this working? Since the state has only been able to get 31 percent of the wheat crop (average 1967-1976), it is forced to import the wheat to meet projected consumption needs. Imports of wheat and flour were greater than the total amount of wheat purchased by the state from SAR producers during the nine-year period 1967-1975. What

happens to the 69 percent of the total production not sold to the state?
Perhaps it is sold locally for a higher price or valued higher for home
use.

We recommend that the effects of fixed prices on the incomes of
small farmers be carefully evaluated. It may be desirable to support incomes
of small farmers with direct payments in addition to product prices.

It seemed apparent that the private sector, of which agriculture
is a part, has been discriminated against relative to the public sector;
e.g. industry. In the stages of economic development agriculture clearly
plays a leading role and should not be treated as if of secondary importance.

Hopefully the recent farm survey will provide evidence on the
importance of farm price subsidies for farm income levels and distribution.
This is critical information in assessing the effect of price policy.

1.6 References

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APPENDIX 1.A

COMMODITY TABLES

Appendix 1.A

Table 1.

Hectares Harvested and Associated Government-Supported Prices, Selected Crops, 1967-78

	WHEAT (SOFT)		BARLEY-WHITE		LENTILS-WHITE	
	Hectares	Price[a]	Hectares	Price[a]	Hectares	Price[a]
1978		66		51		85
1977	1528000	62	1021000	45	178300	110
1976	1590259	50	1171922	41	146479	135
1975	1692267	50	1011393	41	97844	125
1974	1537220	44	696952	35	85411	60
1973	1475769	37	914475	28	92081	50
1972	1354000	32	593000	23	115100	44
1971	1252000	29	599000	18	129080	40
1970	1340531	29	1126117	13	139511	45
1969	1221109	29	626117	16	110445	37
1968	891000	29	631000	16	99312	–
1967	1200771	28	645587	20	77003	–

[a]In piasters/Kg.

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1969-78 and Ministry of Agriculture and Agrarian Reform, Annual Agricultural Statistical Abstract 1976.

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Table 2.

Hectares Harvested and Associated Government-Supported

Prices, Selected Crops, 1967-77

	COTTON		SUGAR-BEETS (SUMMER)		PEANUTS (WHITE)	
	Hectares	Price[a]	Hectares	Price[a]	Hectares[b]	Price[a]
1977	186500	170	12200	15.0	10900	200
1976	181760	145	8510	14.0	13370	160
1975	208126	135	8088	14.0	12593	160
1974	205475	115	6507	11.5	12409	125
1973	200417	90	7697	8.0	12223	90
1972	238212	84	9578	6.5	12723	–
1971	250483	80	8630	6.5	10802	–
1970	249403	80	9026	6.0	9390	–
1969	299072	80	7225	–	9002	–
1968	279426	80	7532	–	8812	–
1967	239435	78	6584	–	8404	–

[a] In piasters/Kg.

[b] Total hectares of peanuts harvested.

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1969-78, and Ministry of Agriculture and Agrarian Reform, Annual Statistical Abstract 1976.

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Table 3.

World Prices of Selected Agricultural Commodities, Export Ports, 1973-77

Year	WHEAT Australia	BARLEY Australia	MAIZE USA	RAW SUGAR Caribbean	LENTILS Chile	CHICK PEAS Netherlands
			$/100 kg			
1977	10.5			17.9		46.4
1976	11.8	13.0	10.2	25.5		39.6
1975	15.2	13.4	11.7	45.2	53.6	41.9
1974	17.5	15.3	12.8	66.1	71.8	59.5
1973	18.9	12.0	12.3	21.2	54.5	33.3

Year	COTTON UK*	FLOUR Australia	RICE Australia	DRY BEANS UK*	ORANGES Israel	OLIVE OIL Spain
			$/100 kg			
1977			n.a.	41.2	n.a.	129.0
1976		20.6	27.3	50.5	22.6	132.6
1975		23.0	30.9	48.3	19.4	188.5
1974		29.8	35.5	73.7	25.2	191.0
1973		22.3	29.8	84.5	16.1	121.3

*Import price.

Source: Food and Agriculture Organization, F.A.O. Production Yearbook, United Nations, Rome.

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Table 4.

Local Potatoes; Retail Annual Average Prices, by Mohafazat, 1969-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969
					- Piasters/KG -				
Damascus	136	139	94	74	61	41	43	42	43
Aleppo	131	144	96	83	66	50	54	54	52
Homs	131	115	78	64	56	44	47	n.a.	n.a.
Hama	125	117	75	69	58	46	44	n.a.	n.a.
Tartous	115	122	77	61	55	46	47	n.a.	n.a.
Latakia	130	128	82	69	56	46	45	n.a.	n.a.
Idleb	116	120	80	60	59	43	47	n.a.	n.a.
Al Rakka	120	97	77	60	59	45	48	n.a.	n.a.
Deir Ezor	125	113	95	62	65	45	·46	n.a.	n.a.
Al Hasakeh	135	n.a.	n.a.	81	61	44	44	n.a.	n.a.
Sweida	123	114	83	74	60	45	45	n.a.	n.a.
Dara	122	123	79	70	68	48	50	n.a.	n.a.
Quintra	-	-	-	-	-	-	-	n.a.	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues
1971-1978.

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Table 5.

Local Potatoes; Wholesale Annual Average Prices, by Mohafazat, 1963-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1963
					— — — Piasters/KG — — — — —								
Damascus	116	104	80	61	52	33	37	36	37	34	28	32	—
Aleppo	108	117	74	63	53	35	36	36	42	37	39	31	31
Homs	102	106	65	52	44	27	35	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	105	102	64	53	47	38	36	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	98	98	65	51	47	35	37	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	106	105	68	55	44	33	39	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	105	110	67	54	54	33	40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	107	85	65	53	55	—	—	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	109	104	78	52	51	—	44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	112	110	n.a.	65	55	31	31	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	112	108	74	60	53	34	45	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	106	100	68	57	52	39	39	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Quintra	—	—	—	—									

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1964-1978.

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Table 6.

Imported Potatoes; Retail Annual Average Prices, by Mohafazat, 1966-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966
	- - - - - - - - - - - - - Piasters/KG -
Damascus	144	123	112	70	70	55	42	42	–	22	33	27
Aleppo	135	143	120	89	65	55	54	54	–	21	33	28
Homs	n.a.	–	n.a.	59	60	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	115	–	84	61	55	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	113	117	87	69	68	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	110	128	100	65	62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	120	116	82	67	70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	130	120	85	75	61	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	120	130	n.a.	n.a.	59	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	123	117	78	64	60	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	117	115	85	70	53	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	125	123	88	60	62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Quintra	–	–	–	–	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. – not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1967-78.

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Table 7.

Imported Potatoes; Wholesale Annual Average Prices, by Mohafazat, 1970-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970
					Piasters/KG				
Damascus	115	108	90	63	60	42	42	34
Aleppo	105	120	95	65	57	35	38	43
Homs	n.a.	n.a.	n.a.	51	47	43	43	n.a.
Hama	108	n.a.	75	55	45	45	46	n.a.
Tartous	108	110	77	n.a.	50	44	41	n.a.
Latakia	100	105	80	56	46	45	45	n.a.
Idleb	110	108	69	59	60	45	44	n.a.
Al Rakka	113	105	76	52	49	38	40	n.a.
Deir Ezor	103	102	n.a.	n.a.	50	35	37	n.a.
Al Hasakeh	109	94	65	55	55	45	45	n.a.
Sweida	105	98	72	50	46	44	40	n.a.
Dara	109	102	73	56	53	39	41	n.a.
Quintra	–	–	–	–	–	n.a.	n.a.	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues
1970-1978.

Appendix 1.A

Table 8.

Tomatoes; Retail and Wholesale Annual Average
Prices, Damascus and Aleppo, 1963-77

Year	Damascus		Aleppo	
	Retail	Wholesale	Retail	Wholesale
- - - - - - - - - - - Piasters/KG - - - - - - - - - - -				
1977	215	200	167	135
1976	148	110	158	125
1975	130	103	150	125
1974	64	53	104	76
1973	108	81	98	78
1972	79	67	89	72
1971	80	57	85	69
1970	60[a]	50[a]	72[a]	53[a]
1969	63	n.a.	70	n.a.
1968	51	n.a.	51	n.a.
1967	54	n.a.	65	n.a.
1966	36	n.a.	48	n.a.
1965	55	n.a.	62	n.a.
1964	48	n.a.	65	n.a.
1963	42	n.a.	48	n.a.

[a]Listed as imported 1970 to date.

Source: (Central Bureau of Statistics), Statistical
Abstract, 1969-78.

Appendix 1.A

Table 9.

Watermelon; Retail Annual Average Prices, by Mohafazat, 1963-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963
								-- Piasters/KG --							
Damascus	55	80	80	61	70	31	38	37	35	36	23	32	25	26	33
Aleppo	65	71	67	66	63	25	26	37	27	24	17	22	22	20	19
Homs	55	64	60	71	48	27	26	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	76	50	35	61	41	21	20	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	69	74	48	57	48	28	23	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	52	57	57	53	49	27	24	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	59	55	43	65	52	15	16	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	66	54	53	59	52	28	26	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	45	38	34	57	52	25	18	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	51	61	43	52	55	18	20	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	63	68	52	39	51	38	27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	56	55	48	47	55	30	26	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1963-1978.

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Table 10.

Watermelon; Wholesale Annual Average Prices, by Mohafazat, 1970-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970
	– – – – – – – – – – – Piasters/KG – – – – – – – – – – – – – –							
Damascus	38	65	63	46	57	25	30	30
Aleppo	50	56	50	53	51	19	20	29
Homs	45	44	42	65	37	21	15	n.a.
Hama	60	43	42	43	31	15	15	n.a.
Tartous	54	51	32	47	38	21	17	n.a.
Latakia	42	52	45	44	39	21	18	n.a.
Idleb	45	38	33	43	37	12	11	n.a.
Al Rakka	46	35	45	38	35	19	18	n.a.
Deir Ezor	36	32	29	40	32	19	14	n.a.
Al Hasakeh	38	45	36	43	38	13	13	n.a.
Sweida	52	49	40	34	39	20	20	n.a.
Dara	46	39	38	39	34	25	20	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues
         1970-1978.

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Table 11.

Red Onions; Retail & Wholesale Annual Average Prices,
Damascus and Aleppo, 1963-77

Year	Damascus		Aleppo	
	Retail	Wholesale	Retail	Wholesale
- - - - - - - - - - Piasters/KG - - - - - - - - - - - -				
1977	91	85	114	95
1976	160	118	144	110
1975	57	45	59	43
1974	32	25	34	25
1973	46	36	44	34
1972	26	19	29	21
1971	19	14	22	16
1970	40	37	50	38
1969	37	32	42	34
1968	22	16	21	15
1967	33	27	33	22
1966	27	19	28	16
1965	30	25	31	21
1964	31	26	30	21
1963	17	9	17	9

Source: (Central Bureau of Statistics), Statistical
Abstract, various issues 1963-77.

Appendix 1.A

Table 12.

Cucumbers; Retail Annual Average Prices, by Mohafazat, 1964-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964
							Piasters/KG							
Damascus	141	200	135	102	86	55	98	75	73	65	69	59	59	73
Aleppo	167	186	142	133	96	50	100	127	128	48	47	48	79	41
Homs	134	129	98	98	90	66	63	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	190	157	130	107	77	52	66	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	190	140	107	99	102	103	110	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	145	130	120	102	93	72	118	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	139	153	93	91	86	57	67	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	160	139	104	102	95	54	86	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	160	152	118	109	139	44	66	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	168	157	137	123	88	61	73	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	150	152	128	88	88	77	74	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	124	136	102	95	98	53	60	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), <u>Statistical Abstract</u>, various issues 1964-1978.

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Table 13.

Cucumbers; Wholesale Annual Average Prices, by Mohafazat, 1970-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970
				Piasters/KG				
Damascus	115	174	120	96	78	50	80	70
Aleppo	140	149	125	113	88	40	124	103
Homs	109	107	86	78	73	58	49	n.a.
Hama	160	130	100	84	65	50	51	n.a.
Tartous	140	112	96	86	83	84	74	n.a.
Latakia	117	98	105	83	77	60	100	n.a.
Idleb	114	135	85	77	64	46	48	n.a.
Al Rakka	132	122	97	90	79	42	45	n.a.
Deir Ezor	137	130	110	101	83	45	63	n.a.
Al Hasakeh	135	134	120	98	74	49	66	n.a.
Sweida	130	125	105	76	71	60	41	n.a.
Dara	110	105	85	75	71	51	45	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues
          1970-1978.

Appendix 1.A

Table 14.

Squash; Retail Annual Prices by Mohafazat, 1970-75[a]

Mohafazat	1975	1974	1973	1972	1971	1970
			- - - - - - -Piasters/KG- - - - - - - - - - - - - - - - -				
Damascus	90	77	58	57	58	40
Aleppo	60	53	42	32	40	51
Homs	71	53	54	32	45	n.a.
Hama	54	46	54	25	32	n.a.
Tartous	84	50	50	42	44	n.a.
Latakia	75	54	63	34	38	n.a.
Idleb	55	57	46	27	33	n.a.
Al Rakka	64	57	42	40	29	n.a.
Deir Ezor	n.a.	n.a.	-	-	-	n.a.
Al Hasakeh	n.a.	n.a.	-	-	37	n.a.
Sweida	n.a.	45	-	-	-	n.a.
Dara	77	n.a.	48	39	41	n.a.
Quintra	-	-	-	-	-	n.a.

[a]Series discontinued in 1976.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various
          issues 1971-1977.

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Appendix 1.A

Table 15.

Squash; Wholesale Annual Average Prices, by Mohafazat, 1970–75[a]

Mohafazat	1975	1974	1973	1972	1971	1970
	⎯ ⎯ ⎯ ⎯ ⎯ ⎯ ⎯ Piasters/KG ⎯ ⎯ ⎯ ⎯ ⎯ ⎯ ⎯ ⎯ ⎯ ⎯ ⎯ ⎯					
Damascus	67	55	49	46	46	36
Aleppo	48	43	35	21	32	39
Homs	62	43	41	24	30	n.a.
Hama	44	39	36	17	22	n.a.
Tartous	63	37	45	31	29	n.a.
Latakia	61	44	48	25	38	n.a.
Idelb	44	50	37	20	25	n.a.
Al Rakka	43	45	31	30	17	n.a.
Deir Ezor	n.a.	n.a.	–	–	–	n.a.
Al Hasakeh	69	n.a.	–	–	29	n.a.
Sweida	n.a.	n.a.	–	–	–	n.a.
Dara	48	n.a.	39	26	31	n.a.
Quintra	–	–	–	–	–	–

[a]Series discontinued in 1976.

n.a. – not available

Source: (Central Bureau of Statistics), Statistical Abstract, various
          issues 1971–1977.

Appendix 1.A

Table 16.

Hilwani Grapes; Retail Annual Average Prices, by Mohafazat, 1963-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963
									Piasters/KG						
Damascus	86	225	210	132	125	65	72	83	74	83	41	55	46	59	49
Aleppo	204	197	180	135	125	63	75	87	76	69	50	66	46	60	70
Homs	161	150	138	110	98	79	87	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	162	145	104	97	85	63	64	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	150	153	116	97	86	77	51	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	164	162	156	105	85	71	61	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	165	157	140	95	70	64	48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	158	155	133	107	98	70	56	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	176	161	175	124	101	45	55	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	164	162	155	110	82	75	78	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	163	156	106	107	63	89	39	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	157	155	113	105	68	36	35	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1963-1978.

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Table 17.

Hilwani Grapes; Wholesale Annual Average Prices, by Mohafazat, 1970-77

Mohafazat	1977	1976	1975	1974	1973	1972	1972	1971
				- - - - - - - - - - Piasters/KG - - - - - - - - - - - - - - - - -					
Damascus	173	175	165	120	110	60	59	71
Aleppo	192	141	139	110	105	49	60	73
Homs	135	125	116	84	80	62	62	n.a.
Hama	117	98	92	75	71	46	38	n.a.
Tartous	113	108	95	87	71	59	42	n.a.
Latakia	117	106	126	91	70	57	54	n.a.
Idleb	121	110	109	81	61	60	43	n.a.
Al Rakka	118	113	109	90	60	56	37	n.a.
Deir Ezor	138	125	139	99	79	35	45	n.a.
Al Hasakeh	125	118	135	86	61	60	52	n.a.
Sweida	125	115	98	81	40	69	–	n.a.
Dara	115	104	94	88	37	25	28	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1971-
         1978.

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Appendix 1.A

Table 18.

Local Apples; Retail Annual Average Prices, by Mohafazat, 1970-75[a]

Mohafazat	1975	1974	1973	1972	1971	1970
			- - - - Piasters/KG - - - - - - - - -			
Damascus	137	113	101	71	57	91
Aleppo	128	110	93	75	67	69
Homs	148	102	98	81	74	n.a.
Hama	150	85	99	48	70	n.a.
Tartous	95	94	94	61	50	n.a.
Latakia	85	92	99	45	47	n.a.
Idleb	100	85	95	50	62	n.a.
Al Rakka	110	127	99	82	81	n.a.
Deir Ezor	95	87	97	70	54	n.a.
Al Hasakeh	82	95	96	68	56	n.a.
Sweida	140	112	96	82	81	n.a.
Dara	106	117	91	92	53	n.a.
Quintra	–	–	–	–	–	n.a.

[a]Series discontinued in 1976.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1971-1977.

Appendix 1.A

Table 19.

   Local Apples; Wholesale Annual Average Prices, by Mohafazat, 1970-75[a]

Mohafazat	1975	1974	1973	1972	1971	1970
			– – – – –Piasters/KG– – – – – – – – – –			
Damascus	113	98	96	58	44	80
Aleppo	102	92	82	50	54	63
Homs	128	82	72	64	64	n.a.
Hama	123	73	64	33	61	n.a.
Tartous	75	77	67	47	39	n.a.
Latakia	69	71	69	40	38	n.a.
Idleb	75	75	62	38	50	n.a.
Al Rakka	89	100	79	64	43	n.a.
Deir Ezor	80	75	65	55	42	n.a.
Al Hasakeh	72	82	68	45	48	n.a.
Sweida	120	91	76	60	49	n.a.
Dara	89	84	80	65	43	n.a.
Quintra	–	–	–	–	–	n.a.

[a]Series discontinued in 1976.

n.a. – not available

Source: (Central Bureau of Statistics), Statistical Abstract, various
          issues 1971-1977.

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Table 20.

Apricots; Retail and Wholesale Annual Average Prices, Damascus, Aleppo, and All

Other Mohafazats, 1966-77

Year	Damascus		Aleppo		Other Mohafazats[a]	
	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale

- - - - - - - - - - - - - - - - Piasters/KG - - - - - - - - - - - - - - - - - -

Year	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale
1977	278	244	306	231	228	162
1976	175	145	210	147	173	132
1975	167	130	183	140	153	126
1974	186	159	190	179	158	134
1973	167	143	171	150	123	103
1972	115	93	123	110	99	81
1971	79	65	110	89	104	75
1970	88	86	118	97	n.a.	n.a.
1969	103	n.a.	129	n.a.	n.a.	n.a.
1968	67	n.a.	52	n.a.	n.a.	n.a.
1967	93	n.a.	79	n.a.	n.a.	n.a.
1966	106	n.a.	96	n.a.	n.a.	n.a.

[a]Simple average of all other Mohafazats.

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1969-78.

Appendix 1.A

Table 21.

Imported Oranges; Retail Annual Average Prices, by Mohafazat, 1970-75[a]

Mohafazat	1975	1974	1973	1972	1971	1970
			- - - - - Piasters/KG - - - - - -			
Damascus	124	117	95	80	70	84
Aleppo	143	121	99	90	79	78
Homs	131	109	97	79	64	n.a.
Hama	113	96	98	71	63	n.a.
Tartous	140	112	91	84	82	n.a.
Latakia	135	118	85	93	74	n.a.
Idelb	116	104	86	69	71	n.a.
Al Rakka	125	110	92	71	72	n.a.
Deir Ezor	142	104	92	63	75	n.a.
Al Hasakeh	126	120	88	83	78	n.a.
Sweida	127	98	78	85	70	n.a.
Dara	120	110	80	114	72	n.a.

[a]Series discontinued in 1976.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1970-1977.

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Table 22.

Imported Oranges; Wholesale Annual Average Prices, by
Mohafazat, 1970-75[a]

Mohafazat	1975	1974	1973	1972	1971	1970
				- Piasters/KG-			
Damascus	98	97	70	70	57	63
Aleppo	115	98	80	78	64	63
Homs	109	91	63	63	49	n.a.
Hama	92	86	59	57	49	n.a.
Tartous	118	91	59	70	67	n.a.
Latakia	114	92	64	76	66	n.a.
Idleb	103	88	69	58	59	n.a.
Al Rakka	102	85	58	59	55	n.a.
Deir Ezor	118	82	62	52	63	n.a.
Al Hasakeh	95	98	73	66	63	n.a.
Sweida	106	85	62	64	56	n.a.
Dara	102	97	62	98	55	n.a.

[a]Series of discontinued in 1976.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various
issues 1970-1977.

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Appendix 1.A

Table 23.

Bananas; Retail Annual Average Prices, by Mohafazat, 1963-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963
								- Piasters/KG -							
Damascus	279	310	237	215	205	166	168	141	127	113	112	87	105	105	92
Aleppo	281	268	260	230	214	171	149	145	130	122	119	123	127	117	106
Homs	287	260	259	232	216	203	171	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	281	270	254	231	215	194	170	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	277	253	240	220	190	157	159	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	262	250	235	215	181	175	157	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	283	266	260	230	194	164	163	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	300	285	280	232	219	179	173	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	317	298	288	239	228	181	165	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	327	317	285	235	214	191	186	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	297	282	258	234	183	181	139	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	293	273	263	230	198	195	160	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1963-1978.

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Table 24.

Bananas; Wholesale Annual Average Prices, by Mohafazat, 1970-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970
					Piasters/KG			
Damascus	249	225	212	197	180	145	147	124
Aleppo	242	225	226	199	211	159	134	125
Homs	245	240	220	203	188	167	148	n.a.
Hama	230	232	233	198	191	161	136	n.a.
Tartous	245	227	210	186	148	138	134	n.a.
Latakia	241	222	205	183	152	141	130	n.a.
Idleb	253	239	227	202	175	142	141	n.a.
Al Rakka	267	250	242	210	195	160	150	n.a.
Deir Ezor	274	253	245	215	210	154	146	n.a.
Al Hasakeh	275	264	242	218	198	159	155	n.a.
Sweida	266	247	223	200	165	149	138	n.a.
Dara	265	239	228	205	172	170	140	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1970-
         1978.

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Table 25.

Sheep Meat; Retail and Wholesale, Annual Average Prices,
Damascus and Aleppo, 1963-77

| Year | Damascus | | Aleppo | |
	Retail Dressed	Wholesale With Bones	Retail Dressed	Wholesale With Bones
	- - - - - - - - - - - -Piasters/KG - - - - - - - - - - - -			
1977	1880	1200	1700	1300
1976	1729	1000	1510	1300
1975	1394	950	1350	–
1974	1368	900	1325	946
1973	852	n.a.	876	n.a.
1972	720[a]	n.a.	776[a]	n.a.
1971	n.a.	n.a.	n.a.	n.a.
1970	623	392	575	427
1969	573	463	550	428
1968	611	415	578	391
1967	571	432	532	395
1966	477	371	503	332
1965	471	372	454	325
1964	478	346	471	317
1963	492	327	434	302

n.a. - not available

[a]Mutton, 1972-1975.

Source: (Central Bureau of Statistics), Statistical Abstract,
various issues 1963-77.

Appendix 1.A

Table 26.

Cow Meat; Retail and Wholesale, Annual Average Prices

In Damascus and Aleppo, 1963-67

Year	Damascus		Aleppo	
	Retail Dressed	Wholesale With Bones	Retail Dressed	Wholesale With Bones

- - - - - - - - - - - -Piasters/KG- - - - - - - - - - - - - -

Year	Retail Dressed	Wholesale With Bones	Retail Dressed	Wholesale With Bones
1977	1450	n.a.	1413	n.a.
1976	1146	n.a.	1068	n.a.
1975	1050	n.a.	968	n.a.
1974	950	n.a.	943	n.a.
1973	688	n.a.	696	n.a.
1972	623[a]	n.a.	613[a]	n.a.
1971	n.a.	n.a.	n.a.	n.a.
1970	487	351	431	334
1969	433	333	405	321
1968	417	363	419	364
1967	396	313	391	296
1966	328	261	357	244
1965	350	250	321	225
1964	335	237	331	235
1963	352	234	295	220

n.a. - not available

[a]Beef dressed 1972-1975; 1976 Statistical Abstract, Page 515; may be different than 1963-1970.

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1963-78.

Appendix 1.A

Table 27.

Calf Meat Dressed; Retail and Wholesale Annual
Average Prices, in Damascus and Aleppo, 1964-77

Year	Damascus		Aleppo	
	Retail	Wholesale	Retail	Wholesale
	— — — — — — — — — Piasters/KG — — — — — — — — — —			
1977	1500	1450	1354	1413
1976	1417	1146	1145	1068
1975	1100	920	1023	–
1974	1075	906	1000	804
1973	760	655	773	680
1972	666	n.a.	638	n.a.
1971	n.a.	n.a.	n.a.	n.a.
1970	515	n.a.	464	n.a.
1969	465	n.a.	455	n.a.
1968	457	n.a.	460	n.a.
1967	435	n.a.	446	n.a.
1966	378	n.a.	396	n.a.
1965	385	n.a.	390	n.a.
1964	371	n.a.	368	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical
Abstract, various issues 1963-78.

Appendix 1.A

Table 28.

Live Poultry; Retail & Wholesale Annual Average Prices,
Damascus & Aleppo, 1964-77

Year	Damascus		Aleppo	
	Retail	Wholesale	Retail	Wholesale
- - - - - - - - - - Piasters/KG - - - - - - - - - - -				
1977	712	663	710	670
1976	665	600	653	620
1975	640	593	595	560
1974	655	602	595	573
1973	372	328	390	313
1972	311[a]	283[a]	350	239[a]
1971	n.a.	310	n.a.	299
1970	318	294[a]	316	378[a]
1969	342	n.a.	340	n.a.
1968	318	n.a.	286	n.a.
1967	302	n.a.	274	n.a.
1966	256	n.a.	241	n.a.
1965	263	n.a.	253	n.a.
1964	301	n.a.	350	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical
          Abstract, various issues 1963-78.

Appendix 1.A
Table 29.

Local White Cheese; Retail Annual Average Prices, by Mohafazat, 1963-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963
								— Piasters/KG —							
Damascus	700	665	663	477	417	374	379	305	291	284	281	376	248	276	231
Aleppo	750	664	559	535	475	390	439	336	300	323	332	340	310	290	272
Homs	614	500	474	457	393	321	368	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	644	525	497	456	403	301	371	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	634	532	496	475	413	300	274	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	683	639	520	463	455	349	388	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	642	608	496	450	483	403	448	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	645	506	450	488	425	333	323	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	692	500	495	420	377	300	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	622	502	455	418	440	311	390	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	625	622	500	424	426	–	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	638	562	500	497	475	331	318	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. – not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1963-1978.

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Table 30.

Local White Cheese; Wholesale Annual Average
Prices, by Mohafazat, 1973-77

Mohafazat	1977	1976	1975	1974	1973
	- - - - - - Piasters/KG- - - - - - - - - -				
Damascus	590	515	450	438	383
Aleppo	650	604	497	467	411
Homs	550	433	440	400	370
Hama	600	475	390	437	375
Tartous	575	500	420	425	325
Latakia	600	549	476	426	416
Idleb	573	572	460	425	430
Al Rakka	545	440	400	453	390
Deir Ezor	500	393	410	370	340
Al Hasakeh	-	-	-	325	350
Sweida	598	590	450	-	390
Dara	563	517	446	435	375

Source: (Central Bureau of Statistics), Statistical Abstract,
various issues 1970-1978.

Appendix 1.A

Table 31.

Fresh Milk; Retail Annual Average Prices, by Mohafazat, 1963-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963
								Piasters/KG							
Damascus	130	120	100	95	83	69	68	59	58	52	60	54	50	51	49
Aleppo	132	119	115	117	88	84	68	76	60	69	70	63	64	65	62
Homs	112	100	100	75	72	70	62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	112	97	84	77	75	65	60	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	106	92	88	70	71	60	57	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	100	92	84	72	65	58	57	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	121	92	85	90	98	67	55	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	108	92	85	112	85	100	98	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	96	88	80	–	65	63	54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	125	110	–	68	65	56	64	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	120	112	100	95	80	79	73	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	116	103	95	88	65	60	55	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1963-1978.

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Table 32.

Fresh Milk; Wholesale Annual Average Prices,
by Mohafazat, 1973-77

Mohafazat	1977	1976	1975	1974	1973
	- - - - - - -Piasters/KG - - - - - - - - - -				
Damascus	115	100	90	85	71
Aleppo	120	107	96	101	75
Homs	102	95	95	-	56
Hama	99	89	74	70	58
Tartous	93	86	75	61	56
Latakia	95	83	75	63	57
Idleb	108	82	77	69	72
Al Rakka	102	82	75	97	60
Deir Ezor	88	76	70	-	57
Al Hasakeh	-	-	-	65	60
Sweida	115	108	95	81	65
Dara	110	95	80	75	57

Source: (Central Bureau of Statistics), <u>Statistical Abstract</u>,
various issues 1970-1978.

Appendix 1.A

Table 33.

Fresh Yogurt; Retail Annual Average Prices, by Mohafazat, 1964-77

Mohafazat	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964
							-Piasters/KG -							
Damascus	145	142	125	110	96	91	84	72	69	71	69	66	62	62
Aleppo	165	180	194	186	98	132	126	101	99	96	–	65	65	82
Homs	133	110	106	100	91	85	76	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hama	133	110	95	89	95	92	80	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tartous	115	94	75	85	73	58	54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latakia	120	105	95	81	75	68	67	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Idleb	160	133	120	160	105	98	80	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Rakka	158	146	135	122	108	110	112	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deir Ezor	123	100	95	101	70	65	59	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Al Hasakeh	134	118	100	85	81	71	77	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweida	125	117	105	88	84	75	75	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dara	123	110	95	94	70	65	61	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. - not available

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1963-1978.

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Table 34.

Fresh Yogurt; Wholesale Annual Average
Prices, by Mohafazat, 1973-77

Mohafazat	1977	1976	1975	1974	1973
		- - - - - - -Piasters/KG - - - - - - - - - -				
Damascus	133	125	115	98	87
Aleppo	135	165	154	135	95
Homs	113	102	100	93	78
Hama	125	104	80	76	80
Tartous	105	85	68	64	65
Latakia	105	91	86	73	70
Idleb	140	120	109	97	95
Al Rakka	132	140	114	111	93
Deir Ezor	113	–	80	78	65
Al Hasakeh	114	–	83	65	66
Sweida	115	112	100	–	79
Dara	112	103	90	85	65

Source: (Central Bureau of Statistics), <u>Statistical Abstract</u>,
various issues 1972-1978.

Appendix 1.A

Table 35.

Eggs, Retail & Wholesale Annual Average Prices,
Damascus and Aleppo, 1963–77

Year	Damascus		Aleppo	
	Retail	Wholesale	Retail	Wholesale
— — — — — — — — — — Piasters/KG — — — — — — — — — —				
1977	359	319	333	292
1976	292	250	276	240
1975	260	225	265	232
1974	272	249	282	245
1973	214	190	231	210
1972	159	140	172	140
1971	160	140	178	150
1970	158	140	158	140
1969	155	146	158	139
1968	142	128	140	120
1967	143	134	145	119
1966	134	131	123	98
1965	128	110	131	120
1964	132	120	120	110
1963	128	110	119	100

Source: (Central Bureau of Statistics), Statistical
Abstract, various issues 1969–78.

Appendix 1.A

Table 36.

Cotton Seed Oil; Retail & Wholesale Annual Average Prices, Damascus and Aleppo, 1963-77

Year	Damascus				Aleppo			
	Retail		Wholesale		Retail		Wholesale	
				– – – Piasters/KG – – – – – – – – – – – – –				
1977	290	160	275	148	290	160	275	148
1976	290	160	275	148	290	160	275	148
1975	290	160[a]	275	148[a]	290	160[a]	275	148[a]
1974	178		149		189		146	
1973	167		151		185		162	
1972	154		141		151		138	
1971	150		136		160		141	
1970	149		143		162		135	
1969	142		140		153		134	
1968	146		140		161		135	
1967	149		141		158		140	
1966	137		127		144		124	
1965	129		116		120		108	
1964	105		96		116		96	
1963	124		113		131		145	

[a]With supply voucher; other is "market" price.

Source: (Central Bureau of Statistics), Statistical Abstract, various issues 1969-78.

Appendix 1.A

Table 37.

Local Olive Oil; Retail & Wholesale Annual
Average Prices, Damascus and Aleppo, 1963-77

Year	Damascus		Aleppo	
	Retail	Wholesale	Retail	Wholesale
- - - - - - - - - - Piasters/KG - - - - - - - - - - - -				
1977	782	670	775	654
1976	770	666	675	631
1975	645	595	656	595
1974	550	512	602	525
1973	482	460	492	440
1972	472	457	475	428
1971	449	426	460	408
1970	341	316	316	282
1969	282	275	271	251
1968	306	281	276	251
1967	305	279	254	225
1966	306	225	248	273
1965	260	245	239	197
1964	332	308	274	237
1963	350	307	319	288

Source: (Central Bureau of Statistics), Statistical
Abstracts, various issues 1969-78.

Appendix 1.A

Table 38.

Sugar Powder; Retail & Wholesale Annual Average Prices,
Damascus & Aleppo, 1963-77

Year	Damascus				Aleppo			
	Retail		Wholesale		Retail		Wholesale	
			— — — — — — — — — — — — — Piasters/KG — — — — — — — — — — — — —					
1977	300	85	292	82	300	85	292	82
1976	300	85	292	82	300	85	292	82
1975	300	85	292	82	300	85	292	82
1974	145	85	141	82	145	85	141	82
1973	145	85[a]	141	82[a]	145	85[a]	141	82[a]
1972	85		82		85		82	
1971	85		82		85		82	
1970	100		97		100		97	
1969	100		97		100		97	
1968	100		97		100		97	
1967	100		97		100		97	
1966	100		97		100		97	
1965	118		115		118		115	
1964	94		92		94		92	

[a]Supply voucher sugar.

Source: (Central Bureau of Statistics), Statistical Abstract,
various issues 1969-78.

Appendix 1.A

Table 39.

Wheat Balance Sheet; Domestic Production, Imports, Exports,
Stocks, and Derived Gross and Per Capita Disappearance, 1961-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - 1000 MT - - - - - - - - - - - - - - -KG - -				
1977	1217	458	3.0	1672	208.8
1976	1790	188	6.2	1972	255.7
1975	1550	281.7	2.8	1829	245.9
1974	1630	219.3	2.9	1846	254.9
1973	593	118.6	124.2	587	83.9
1972	1808	359.7	278.7	1889	279.6
1971	846	748.7	0.3	1594	244.2
1970	624	541.9	0.2	1166	184.9
1969	1003	142.6	0.7	1145	186.8
1968	600	307.1	5.1	902	151.4
1967	1049	161.9	0.2	1211	209.4
1966	559	289.5	1.7	1381	246.2
1965	1044	63.0	25.0	1131	208.1
1964	1100	4.3	197.2	900	171.1
1963	1093	7.2	182.1	918	180.5
1962	1093	203.3	213.8	1082	220.2
1961	1093	269.5	-	-	-

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports and exports from Statistics of the Foreign
Trade of Syria; gross disappearance = production + imports
+ stocks - exports; per capita disappearance = gross
disappearance/population.

Appendix 1.A

Table 40.

Rice Balance Sheet; Domestic Production, Imports, Exports, Stocks,

and Derived Gross and Per Capita Disappearance, 1961-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - - - 1000 MT - - - - - - - - - - - KG - - -				
1977	0.2	40.1	0.1	40	5.0
1976	1.1	61.0	-	62	8.0
1975	5.2	50.0	-	55	7.4
1974	2.4	88.0	0.1	90	12.4
1973	0.0	50.7	-	51	7.3
1972	0.4	55.7	0.1	56	8.3
1971	0.4	49.5	0.1	50	7.7
1970	1.3	39.9	-	41	6.5
1969	2.5	30.4	-	33	5.4
1968	7.6	44.0	-	52	8.7
1967	2.2	32.4	-	35	6.2
1965	2.2	28.5	-	31	5.6
1964	1.2	36.3	-	37	7.0
1963	1.0	20.6	-	22	4.3
1962	1.0	35.3	-	36	7.3
1961	1.0	25.9	-	27	5.7

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 41.

Barley Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1961-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
			1000 MT		KG
1977	337	-	127.2	210	26.2
1976	1059	0.1	65.2	994	128.9
1975	596	-	-	596	80.1
1974	655	31.6	0.2	686	94.7
1973	102	-	5.4	97	13.9
1972	710	2.8	36.6	676	100.0
1971	262	76.4	0.1	600	91.9
1970	235	57.8	178.1	115	18.2
1969	627	-	273.1	354	57.7
1968	512	0.1	104.5	408	68.5
1967	589	9.5	34.1	564	97.5
1966	203	-	17.1	186	33.2
1965	690	-	244.8	445	81.9
1964	637	-	208.0	429	81.5
1963	649	-	401.8	247	58.5
1962	649	16.9	390.4	275	56.0
1961	649	22.0	25.5	645	136.1

Source: Central Bureau of Statistics: Production from _Statistical Abstract_; imports and exports from _Statistics of the Foreign Trade of Syria_; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 42.

Maize Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1961-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - 1000 MT - - - - - - - - - - - - - - -				- KG- -
1977	58.7	13.3	-	72	9.0
1976	51.0	22.5	-	73	9.5
1975	27.0	13.0	-	40	5.4
1974	19.0	0.4	-	19	2.6
1973	15.0	4.6	5.4	14	2.0
1972	15.0	2.4	-	17	2.5
1971	8.0	3.0	-	11	1.7
1970	8.0	0.8	-	9	1.4
1969	9.0	0.1	0.1	9	1.5
1968	8.0	6.9	0.1	15	2.5
1967	9.0	0.2	1.0	8	1.4
1966	7.0	7.7	1.6	13	2.3
1965	6.0	5.9	1.9	11	2.0
1964	6.0	2.5	1.7	8	1.5
1963	7.0	0.3	1.4	6	1.2
1962	7.0	7.1	1.2	13	2.6
1961	7.0	11.6	4.4	14	2.9

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 43.

  Millet Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1961-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - 1000 MT - - - - - - - - - - - - - - KG- - -				
1977	23.7			24	3.0
1976	16			16	2.1
1975	14			14	1.9
1974	14	2		16	2.2
1973	13			13	1.9
1972	27			27	4.0
1971	19			19	2.9
1970	13			13	2.1
1969	21			21	3.4
1968	37			37	6.2
1967	39			39	6.7
1966	15			15	2.7
1965	44			44	8.1
1964	44			44	8.4

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports and exports from Statistics of the Foreign
Trade of Syria; gross disappearance = production + imports
+ stocks - exports; per capita disappearance = gross
disappearance/population.

Appendix 1.A

Table 44.

Groundnuts in Shell (Peanuts) Balance Sheet; Domestic Production,

Imports, Exports, Stocks, and Derived Gross and Per Capita

Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	– – – – – – – – – – 1000 MT – – – – – – – – – – – – KG – –				
1977	20.2		4.5	15.7	2.0
1976	23.8		2.7	21.1	2.7
1975	20.8		2.3	18.5	2.5
1974	19.6		2.1	17.5	2.4
1973	23.0		4.3	18.7	2.7
1972	23.5	–	4.7	18.8	2.8
1971	20.1	–	3.7	16.4	2.5
1970	16.3	–	5.2	11.1	1.8
1969	17.2	–	6.8	10.4	1.7
1968	13.8	–	4.8	9.0	1.5
1967	13.5	–	4.4	9.1	1.6
1966	13.4		5.1	8.3	1.5
1965	11.6	–	5.7	5.9	1.1
1964	10.4	–	5.2	5.2	1.0

Source: Central Bureau of Statistics: Production from _Statistical
Abstract_; imports and exports from _Statistics of the Foreign
Trade of Syria_; gross disappearance = production + imports
+ stocks – exports; per capita disappearance = gross
disappearance/population.

Appendix 1.A

Table 45.

Potatoes Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - -1000 MT - - - - - - - - - - - - - KG - - -				
1977	164.0	14.2	0.3	178	22.2
1976	125.9	5.0	0.6	129	16.7
1975	125.0	9.2	0.6	134	18.0
1974	105.0	14.4	0.3	119	16.4
1973	110.0	10.1	0.6	119	17.0
1972	119.0	18.2	4.5	133	19.7
1971	72.0	14.6	-	87	13.3
1970	65.0	10.7	-	76	12.1
1969	47.0	8.1	-	55	9.0
1968	50.0	8.5	0.5	58	9.7
1967	40.0	15.5	-	55	9.5
1966	40.8	9.4	0.5	50	8.9
1965	48.9	8.8	1.7	56	10.3
1964	47.7	22.4	0.8	69	13.2

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 46.

Sugar Balance Sheet, in Raw Sugar Value[a]; Domestic Production,

Imports, Disappearance, Per Capita Disappearance, 1964-77

Year	Production	Imports	Disappearance	Per Capita Disappearance
	- - - - - - - 1000 MT - - - - - - - - - - -			- KG - - -
1977	20.5	190.3	195.7	24.4
1976	26.5	171.5	203.4	26.4
1975	21.7	155.3	214.1	28.8
1974	18.0	225.5	220.0	30.4
1973	18.1	202.5	200.0	28.6
1972	35.0	155.0	180.0	26.6
1971	32.0	217.0	160.0	24.5
1970	26.4	120.8	147.2	23.3
1969	22.0	100.5	122.5	20.0
1968	19.3	59.5	78.8	13.2
1967	17.9	83.4	101.3	17.5
1966	22.0	69.5	91.5	16.3
1965	19.9	80.0	99.9	18.4
1964	19.9	80.7	100.6	19.1

[a]From 1971-77: production, imports, and disappearance taken from "Statistical Bulletin", International Sugar Organization, London: May 1975, May 1976, and Oct./Nov. 1978; from 1964-70: production taken from Statistical Abstract, Agriculture Section, various issues, Central Bureau of Statistics, using 11% as conversion from beet to raw sugar; imports taken from Statistics of the Foreign Trade of Syria, various issues, Central Bureau of Statistics.

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 47.

Cotton Lint Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Stocks	Exports	Disappearance	Per Capita Disappearance
				-1000 MT		KG
1977	144.1	-		141.7	7	0.9
1976	156.3	-	8.6	117.5	47	6.1
1975	158.3	-	11.4	102.1	68	9.1
1974	144.8	-	5.4	109.9	40	5.5
1973	155.5	-	1.5	119.2	38	5.4
1972	163.1	-	2.0	116.4	49	7.3
1971	157.4	-	2.0	119.0	40	6.1
1970	148.8	-	1.0	135.9	14	2.2
1969	149.4	-	0.2	124.1	25	4.1
1968	153.6	-	7.7	99.6	62	10.4
1967	126.5	-	0.1	113.8	13	2.2
1966	141.5	-	-	121.5	20	3.6
1965	203.5	-	-	121.7	82	15.1
1964	189.1	-	-	146.6	43	8.1

Source: Central Bureau of Statistics: Production from Statistical Abstract,
         imports and exports from Statistics of the Foreign Trade of Syria;
         gross disappearance = production + imports + stocks - exports;
         per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 48.

Tobacco Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-78

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - - - - 1000 MT - - - - - - - - - - - KG - -				
1978	13.0				
1977	11.5	1.6	1.5	10.6	1.3
1976	12.0	6.2	3.7	14.5	1.9
1975	12.0	5.0	4.5	12.5	1.7
1974	10.0	3.3	2.6	10.7	1.5
1973	11.0	1.3	2.0	10.3	1.5
1972	11.6	1.4	4.2	8.8	1.3
1971	7.5	0.8	3.6	4.7	0.7
1970	6.6	1.2	5.5	2.3	0.4
1969	9.0	0.5	2.0	7.5	1.2
1968	8.0	0.9	1.9	7.0	1.3
1967	6.0	0.3	1.2	5.1	0.9
1966	9.8	0.3	0.5	9.6	1.7
1965	11.9	0.9	0.0	12.8	2.3
1964	11.2	0.4	0.0	11.6	2.2

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

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Appendix 1.A

Table 49.

Legumes[a] Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - - - 1000 MT - - - - - - - - - - - KG - -				
1977	226.0	0.3	50.8	175	21.9
1976	274.8	0.2	24.3	251	32.5
1975	147.3	0.1	18.0	129	17.3
1974	210.0	0.1	17.9	192	26.5
1973	81.2	0.1	15.1	66	9.4
1972	213.5	0.4	37.2	177	26.2
1971	152.6	0.4	32.2	121	18.5
1970	109.0	0.1	13.8	95	15.1
1969	231.8	0.3	41.1	191	31.1
1968	127.1	0.1	40.3	87	14.6
1967	218.9	0.7	62.5	157	27.1
1966	74.7	0.4	20.9	54	9.7
1965	187.2	0.8	99.5	89	16.3
1964	194.4	0.7	58.7	136	25.9

[a]Includes beans, peas, lentils, vetch, chick peas.

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 50.

Dairy Products Balance Sheet; Domestic Production, Imports,

Exports, Stocks, and Derived Gross and Per Capita

Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - -1000 MT - - - - - - - - - - - - - - KG - - -				
1977	938.6	40.2	1.3	977	122.0
1976	954.8	30.4	1.2	984	127.6
1975	807.1	16.5	1.0	822	110.6
1974	711.1	22.5	0.8	733	101.2
1973	555.4	24.5	0.6	579	83.3
1972	634.8	21.6	1.0	655	96.9
1971	633.3	21.3	0.3	654	100.2
1970	649.4	11.8	0.9	660	104.7
1969	719.3	10.2	1.2	728	118.8
1968	742.3	7.2	1.7	748	125.5
1967	710.5	4.5	1.4	714	123.4
1966	783.6	5.7	1.9	787	140.4
1965	782.3	4.3	2.2	784	144.3
1964	717.0	4.6	1.8	720	136.8

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports and exports from Statistics of the Foreign
Trade of Syria; gross disappearance = production + imports
+ stocks - exports; per capita disappearance = gross
disappearance/population.

Appendix 1.A

Table 51.

Eggs Balance Sheet; Domestic Production, Imports, Exports, Stocks,

and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - 1000 MT - - - - - - - - - - - - - - -				KG - -
1977	33.6	1.4	0.1	34.9	4.36
1976	35.0	2.3	0.2	37.1	4.81
1975	32.8	2.6	0.2	35.2	4.73
1974	20.3	5.0	-	25.3	3.49
1973	18.5	4.6	0.1	23.0	3.29
1972	16.2	8.4	-	24.6	3.64
1971	15.1	7.0	-	22.1	3.39
1970	13.7	3.9	-	17.6	2.79
1969	17.7	3.8	0.0	21.5	3.51
1968	15.7	2.2	-	17.9	3.00
1967	10.6	0.7	0.1	11.2	1.93
1966	11.1	0.2	-	11.3	2.01
1965	15.3	0.1	-	15.4	2.83
1964	14.7	0.1	-	14.8	2.81

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports and exports from Statistics of the Foreign
Trade of Syria; gross disappearance = production + imports
+ stocks - exports; per capita disappearance = gross
disappearance/population.

Appendix 1.A

Table 52.

Poultry Meat Balance Sheet; Domestic Production, Imports,

Exports, Stocks, and Derived Gross and Per Capita Disappearance, 1967-77

Year	Production[a]	Imports	Exports	Disappearance	Per Capita Disappearance
		− − − − − − − − − 1000 MT − − − − − − − − −			−KG− − − −
1977	17.0	1.0	−	18.0	2.2
1976	13.8	−	−	13.8	1.8
1975	11.7	0.6	−	12.3	1.7
1974	7.3	2.5	−	9.8	1.3
1973	6.3	−	−	6.3	0.9
1972	7.0	−	−	7.0	1.0
1971	6.5	−	−	6.5	1.0
1970	5.0	−	−	5.0	0.8
1969	4.9	−	−	4.9	0.8
1968	5.8	−	−	5.8	1.0
1967	5.1	−	−	5.1	0.9

[a]Production based on 1.36 kg per chicken slaughtered.

Source: Central Bureau of Statistics: Production from Statistical
          Abstract; imports and exports from Statistics of the Foreign
          Trade of Syria; gross disappearance = production + imports +
          stocks − exports; per capita disappearance = gross
          disappearance/population.

Appendix 1.A

Table 53.

Beef Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1966-77

Year	Production[a]	Imports	Exports	Disappearance	Per Capita Disappearance
	— — — — — — — — — 1000 MT — — — — — — — — — —				KG — — —
1977	12.6	–	–	12.6	1.6
1976	14.5	–	–	14.5	1.9
1975	11.4	–	–	11.4	1.5
1974	7.1	–	–	7.1	1.0
1973	4.3	0.1	0.1	4.3	0.6
1972	4.8	0.3	0.1	5.0	0.7
1971	8.3	0.3	0.2	8.4	1.3
1970	7.8	0.5	0.2	8.1	1.3
1969	7.4	0.1	0.1	7.4	1.2
1968	6.9	1.0	0.4	7.5	1.3
1967	7.8	–	0.3	7.5	1.3
1966	7.4	0.6	0.8	7.2	1.3

[a]Production based on 172.9 kg per cow slaughtered.

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 54.

Mutton, Lamb, and Goat[a] Balance Sheet; Domestic Production, Imports, Exports, Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ 1000 MT ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑				‑ KG ‑ ‑ ‑
1977	55.2	0.6	–	55.8	7.0
1976	49.1	1.1	–	50.2	6.5
1975	43.0	3.3	–	46.3	6.2
1974	32.2	5.5	–	37.7	5.2
1973	68.0	–	–	68.0	9.7
1972	61.7	–	–	61.7	9.1
1971	69.0	–	–	69.0	10.6
1970	65.1	–	–	65.1	10.3
1969	55.2	–	–	55.2	9.0
1968	52.7	–	–	52.7	8.8
1967	53.7	–	–	53.7	9.3
1966	65.1	–	–	65.1	11.6
1965	53.8	–	–	53.8	9.9
1964	51.1	–	–	51.1	9.7

[a]Production based on 38.28 kg per sheep slaughtered and 75.8 kg per goat slaughtered.

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks – exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 55.

Camels Balance Sheet; Slaughter, Gross Disappearance,

Per Capita Disappearance, 1964-77

Year	Slaughter (Head)	Gross[a] Disappearance	Per Capita Disappearance
		- - - - - - KG - - - - - - - -	
1977	6544	1963200	0.2
1976	7334	2200200	0.3
1975	7300	2190000	0.3
1974	9669	2900700	0.4
1973	9916	2974800	0.4
1972	14865	4459500	0.7
1971	13505	4051500	0.6
1970	13213	3963900	0.6
1969	13506	4051800	0.7
1968	9397	2819100	0.5
1967	9058	2717400	0.5
1966	6702	2010600	0.3
1965	7576	2272800	0.4
1964	7759	2327700	0.4

[a]Based on 600 kg/camel and .50 conversions to carcass weight.

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 56.

Miscellaneous Meats Balance Sheet; Imports, Exports,

Per Capita Disappearance, 1964-77

Year	Imports	Exports	Per Capita Disappearance
	- - - -1000 MT - - - - - - -		KG - - -
1977	1.9	-	0.2
1976	0.5	-	0.1
1975	2.6	-	0.3
1974	5.5	-	0.7
1973	3.4	-	0.5
1972	1.0	-	0.1
1971	2.1	-	0.3
1970	1.2	-	0.2
1969	0.9	-	0.1
1968	0.3	-	0.1
1967	0.7	-	0.1
1966	1.1	-	0.2
1965	-	-	0.0
1964	1.2	-	0.2

Source: Central Bureau of Statistics: Imports and exports from Statistics of the Foreign Trade of Syria; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 57.

Total Meat[a] Balance Sheet; Disappearance and

Per Capita Disappearance, 1964-77

Year	Disappearance	Per Capita Disappearance
	1000 MT	
1977	86.8	11.04
1976	79.6	10.42
1975	68.3	9.48
1974	49.5	7.54
1973	81.6	12.17
1972	78.1	11.66
1971	87.9	13.77
1970	81.9	13.19
1969	71.6	11.78
1968	68.2	11.55
1967	69.3	12.08
1966[b]	74.5	13.48
1965[c]	56.1	10.32
1964[c]	53.4	10.35

[a]Includes sheep & goat, camel, beef, poultry, and miscellaneous meats.

[b]Includes only sheep & goat, camel, and beef.

[c]Includes only sheep & goat, and camel meat.

Source: Appendix Tables 52-56.

Appendix 1.A

Table 58.

Tanned box hides (uppers), public sector

  Balance Sheet; Production and Gross

    Disappearance, 1971-77

Year	Production	Gross Disappearance
	(Sq. Ft)	(Sq. Ft)
1977	3203	3203
1976	3138	3138
1975	3354	3354
1974	3300	3300
1973	3227	3227
1972	2969	2969
1971	2698	2698

Source: Central Bureau of Statistics: Production
from Statistical Abstract; imports and
exports from Statistics of the Foreign
Trade of Syria; gross disappearance =
production + imports + stocks - exports.

Appendix 1.A

Table 59.

Tanned Hides (sole), Public Sector Balance Sheet; Domestic Production,

Imports, Exports, Stocks, and Derived Gross and Per Capita

Disappearance, 1966-77

Year	Production	Imports	Exports	Net[a]	Gross Disappearance[bc]
			------ MT ------		
1977	233	6157	2748	3642	3704
1976	224	5536	2252	3508	3568
1975	238	4246	2047	2437	2501
1974	246	3126	1961	1411	1476
1973	239	4148	3103	1284	1347
1972	227	2856	3245	-162	n.a.
1971	209	1964	2310	-137	n.a.
1970	n.a.	3304	2500	n.a.	n.a.
1969	n.a.	2835	2119	n.a.	n.a.
1968	n.a.	3095	2253	n.a.	n.a.
1967	n.a.	2162	1517	n.a.	n.a.
1966	n.a.	4055	1834	n.a.	n.a.

[a]Includes only public sector.

[b]Add private sector; 25% of public sector.

[c]Add box (uppers), 1 sq. ft. = 1 kg.

n.a. - not available

Source: Central Bureau of Statistics: Production from Statistical Abstract;
imports and exports from Statistics of the Foreign Trade of Syria;
gross disappearance = production + imports + stocks - exports;
per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 60.

Wool, Washed Ton Balance Sheet; Domestic Products, Imports,

    Exports, Stocks, and Derived Gross and Per Capita

        Disappearance, 1966-77

Year	Production	Imports	Exports	Disappearance
			MT		
1977	6834	6319	7961	5192
1976	6560	4058	6202	4416
1975	6170	5433	6460	5143
1974	7114	3997	8650	2461
1973	5497	2730	12091	-3864
1972	6071	2111	9802	-1620
1971	6443	1341	7062	722
1970	7015	1597	5062	3550
1969	7951	1076	5818	3209
1968	6448	1107	6027	1528
1967	6678	903	7316	265
1966	5649	677	8023	-1697

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports and exports from Statistics of the Foreign
Trade of Syria; gross disappearance = production + imports +
stocks - exports; per capita disappearance = gross disappearance/
population.

Appendix 1.A

Table 61.

Vegetable Oil (Cotton Seed) Balance Sheet; Domestic Production,

Imports, Exports, Stocks, and Derived Gross and Per Capita

Disappearance, 1969-77

Year	Production	Imports	Exports	Gross Disappearance	Per Capita Disappearance
	— — — — — — — — — — 1000 MT — — — — — — — — — — — — KG — — —				
1977	24.040	–	–	24.0	3.00
1976	24.727	–	–	24.7	3.20
1975	22.102	–	–	22.1	2.97
1974	25.4	–	–	25.4	3.51
1973	28.7	–	–	28.7	4.10
1972	27.5	–	–	27.5	4.07
1971	26.2	–	2.3	23.9	3.66
1970	25.1	–	4.3	20.8	3.30
1969	26.3	–	6.3	20.0	3.26
1968	22.9	–	9.9	13.0	2.18
1967	26.1	–	6.1	20.0	3.45
1966	n.a.	–	14.2		

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports and exports from Statistics of the Foreign
Trade of Syria; gross disappearance = production + imports +
stocks - exports; per capita disappearance = gross
disappearance/population.

Appendix 1.A

Table 62.

Fruits & Nuts Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Stocks	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - - - 1000 MT - - - - - - - - - - - - - - - - KG - -					
1977	683.3	187.1		9.8	860.6	107.5
1976	648.8	197.7		15.5	831.0	107.7
1975	610.6	157.3		12.4	755.5	101.6
1974	505.9	153.9		18.0	641.8	88.6
1973	359.9	181.0		6.7	534.1	76.4
1972	455.0	127.8		52.6	530.2	78.5
1971	434.5	175.0		50.5	559.0	85.7
1970	373.5	132.7		20.3	485.9	77.1
1969	422.1	114.2		48.2	488.1	79.6
1968	396.1	129.4		33.3	492.6	82.7
1967	400.2	121.9		51.0	471.1	81.2
1966	370.0	103.4		32.3	441.1	78.6
1965	357.0	117.3		51.0	423.3	77.9
1964	406.7	159.7		41.5	524.9	99.8

Source: Central Bureau of Statistics: Production from Statistical Abstract;
imports and exports from Statistics of the Foreign Trade of Syria;
gross disappearance = production + imports + stocks - exports;
per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 63.

Total Olives Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - - -1000 MT - - - - - - - - - - - - -				- KG - - -
1977	175	-	-	175	21.9
1976	233	-	-	233	30.2
1975	157	-	-	157	21.1
1974	215	-	-	215	29.7
1973	73	-	-	73	10.4
1972	161	-	-	161	23.8
1971	117	-	-	117	17.9
1970	85	-	-	85	13.5
1969	129	-	-	129	21.0
1968	112	-	-	112	18.8
1967	113	-	-	113	19.5
1966	117	-	-	117	20.9
1965	66	-	-	66	12.1
1964	123	-	-	123	23.4

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 64.

Fresh Olives Balance Sheet; Domestic Production, Imports,

and Derived Gross and Per Capita Disappearance, 1967-77

Year	Production	Imports	Disappearance	Per Capita Disappearance
- - - - - - - - - 1000 MT - - - - - - - - - - - - - -KG- - -				
1977	29.5	-	29.5	3.68
1976	39.9	-	39.9	5.17
1975	23.7	-	23.7	3.19
1974	38.3	-	38.3	5.29
1973	19.1	-	19.1	2.73
1972	25.1	-	25.1	3.71
1971	28.2	-	28.2	4.32
1970	23.4	-	23.4	3.71
1969	28.1	-	28.1	4.58
1968	27.2	-	27.2	4.57
1967	16.9	-	16.9	2.92

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports from Statistics of the Foreign Trade of
Syria; gross disappearance = production + imports + stocks -
exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 65.

Oil Olives Balance Sheet; Domestic Production, Oil, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1967-77

Year	Production	Oil	Imports	Exports	Gross Disappearance	Per Capita Disappearance
	- - - - - - - - - - 1000 MT - - - - - - - - - - - - - - - - - - KG - -					
1977	145.5	38.6	0.2	-	38.8	4.84
1976	193.5	55.9	0.1	-	56.0	7.26
1975	133.1	33.2	-	-	33.2	4.46
1974	176.7	44.4	1.5	-	45.9	6.34
1973	54.1	13.7	1.3	-	15.0	2.14
1972	136.3	33.4	1.0	-	34.4	5.09
1971	88.9	22.2	0.2	-	22.4	3.43
1970	62.0	15.5	-	0.4	15.1	2.39
1969	100.8	25.6	0.4	0.7	25.3	4.13
1968	84.6	22.4	0.7	0.4	22.7	3.81
1967	96.2	24.1	-	1.5	22.6	3.91

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 66.

Grapes Balance Sheet; Domestic Production, Imports, Exports, Stocks,

and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production		Imports	Exports	Disappearance	Per Capita Disappearance	
			- - - - - - - - - - -1000 MT - - - - - - - - - - - - - - KG - - -				
	All	Fresh				All	Fresh
1977	353	216	0.0	0.0	353.0	44.1	27.0
1976	319	195	0.0	0.0	319.0	41.3	25.2
1975	281	182	0.0	1.1	279.9	37.6	24.3
1974	250	143	0.0	0.0	250.0	34.5	19.7
1973	147	101	0.0	0.0	147.0	21.0	14.4
1972	208	116	0.0	1.8	206.3	30.5	17.0
1971	209	113	0.0	3.1	205.9	31.5	17.0
1970	206	113	-	4.3	210.3	33.3	18.3
1969	248	129	0.7	7.2	241.5	39.4	20.5
1968	213	116	0.3	2.2	211.1	35.4	19.3
1967	213	117	1.1	2.3	211.9	36.6	20.1
1966	202		0.3	4.9	197.6	35.2	
1965	206		0.5	6.8	199.7	36.7	
1964	230		0.4	4.9	225.5	42.9	

Source: Central Bureau of Statistics: Production from Statistical Abstract; imports and exports from Statistics of the Foreign Trade of Syria; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 67.

Apricots Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - - - -1000 MT - - - - - - - - - - -				- KG- - -
1977	32	0.7	--	32.0	3.99
1976	46	0.2	-	46.7	6.05
1975	53	0.4	0.7	52.5	7.06
1974	33	-	-	33.4	4.61
1973	29	0.3	0.5	28.5	4.07
1972	39	0.3	0.7	38.6	5.71
1971	31	0.5	1.5	29.8	4.57
1970	22	0.1	0.5	22.0	3.49
1969	13	1.1	0.6	12.5	2.04
1968	19	n.a.	0.3	19.8	3.32
1967	22	n.a.	n.a.		3.80
1966	15	n.a.	n.a.		2.67
1965	9	n.a.	n.a.		1.65
1964	29	n.a.	n.a.		5.51

Source: Central Bureau of Statistics: Production from _Statistical Abstract_; imports and exports from _Statistics of the Foreign Trade of Syria_, gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 68.

Apples Balance Sheet; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Disappearance	Per Capita Disappearance
	- - - - - - - - - - - 1000 MT - - - - - - - - - - -				KG - - -
1977	61.2	21.5	0.0	82.7	10.3
1976	70.5	20.0	0.0	90.5	11.7
1975	56.5	6.6	0.0	63.1	8.5
1974	44.3	15.8	0.0	60.1	8.3
1973	41.1	20.8	0.3	61.6	8.8
1972	42.4	20.7	0.8	62.3	9.2
1971	34.2	12.7	0.6	46.3	7.1
1970	17.7	8.1	0.6	25.2	4.0
1969	23.1	16.8	0.6	39.3	6.4
1968	25.5	22.7	0.3	47.9	8.0
1967	27.9	8.9	1.0	35.8	6.2
1966	26.1	9.0	1.1	34.0	6.1
1965	21.3	14.2	0.4	35.1	6.5
1964	24.5	11.7	2.0	34.2	6.5

Source: Central Bureau of Statistics: Production from Statistical
Abstract; imports and exports from Statistics of the Foreign
Trade of Syria; gross disappearance = production + imports +
stocks - exports; per capita disappearance = gross
disappearance/population.

Appendix 1.A

Table 69.

Balance Sheet of All Vegetables; Domestic Production, Imports, Exports,

Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Stocks	Exports	Gross Disappearance	Per Capita Disappearance
			- - - - - -1000 MT - - - - - - - - - - - - - -			- - - KG - -
1977	2426.3	74.2		9.4	2492.1	311.0
1976	2306.0	68.9		7.1	2367.8	307.0
1975	2264.4	51.8		30.2	2286.0	307.3
1974	1958.8	73.9		24.8	2007.9	277.3
1973	997.1	52.9		14.8	1035.2	148.0
1972	1535.6	23.3		39.9	1519.0	224.8
1971	1093.9	39.7		33.9	1099.7	168.5
1970	779.5	41.0		34.6	785.9	124.7
1969	991.4	21.9		47.1	966.2	157.6
1968	1210.2	26.4		44.1	1191.9	200.1
1967	1065.9	31.6		55.0	1042.5	180.3
1966	550.7	49.9		51.2	549.4	97.9
1965	765.2	29.1		36.2	758.1	139.5
1964	801.5	33.6		26.8	808.3	153.6

[a]Excludes potatoes.

Source: Central Bureau of Statistics: Production from Statistical Abstract;
imports and exports from Statistics of the Foreign Trade of Syria;
gross disappearance = production + imports + stocks - exports;
per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 70.

Tomatoes Balance Sheet; Domestic Production, Imports, Exports, Stocks,

and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Gross Disappearance	Per Capita Disappearance
			- - - - 1000 MT - - - - - - - - - - -		-KG - -
1977	453.6	35.1	0.2	488.5	61.0
1976	516.6	35.6	0.1	552.1	71.6
1975	375.4	21.8	0.8	396.4	52.3
1974	395.5	43.9	0.0	439.4	60.7
1973	269.0	28.3	0.0	297.3	42.5
1972	315.9	9.2	1.1	324.0	47.9
1971	248.4	28.3	4.9	271.8	41.6
1970	192.4	25.2	11.7	205.9	32.7
1969	192.0	9.7	18.4	183.3	29.9
1968	183.6	12.5	14.9	181.2	30.4
1967	161.6	17.7	15.8	163.5	28.3
1966	126.0	30.7	13.4	143.3	25.5
1965	135.4	10.3	7.6	138.1	25.4
1964	153.2	14.0	6.6	160.6	30.5

Source: Central Bureau of Statistics: Production from _Statistical Abstract_; imports and exports from _Statistics of the Foreign Trade of Syria_; gross disappearance = production + imports + stocks - exports; per capita disappearance = gross disappearance/population.

Appendix 1.A

Table 71.

Watermelon Balance Sheet; Domestic Production, Imports, Exports,

  Stocks, and Derived Gross and Per Capita Disappearance, 1964-77

Year	Production	Imports	Exports	Gross Disappearance	Per Capita Disappearance
			-1000 MT		KG
1977	716.5	0.9	3.1	714.3	89.19
1976	556.8	0.7	10.5	547.0	70.92
1975	551.6	2.1	4.9	548.8	73.78
1974	516.8	0.8	13.2	504.4	69.66
1973	100.3	1.7	0.1	101.9	14.57
1972	459.9	1.2	36.5	424.6	62.84
1971	267.9	1.1	33.6	235.4	36.07
1970	129.4	1.8	8.1	123.1	19.53
1969	370.6	1.6	79.2	293.0	47.79
1968	452.3	2.9	71.7	383.5	64.38
1967	415.8	n.a.	n.a.		
1966	104.2	n.a.	n.a.		
1965	193.3	n.a.	n.a.		
1964	264.8	n.a.	n.a.		

Source: Central Bureau of Statistics: Production from Statistical
        Abstract; imports and exports from Statistics of the Foreign
        Trade of Syria; gross disappearance = production + imports +
        stocks - exports; per capita disappearance = gross
        disappearance/population.

Appendix 1.A

Table 72.

Cattle 000 Head Balance Sheet; Slaughter

and Disappearance, 1966-77

Year	Slaughter	Disappearance Carcass, MT
1977	73	12621.7
1976	84	14523.6
1975	66	11411.4
1974	41	7088.9
1973	25	4322.5
1972	28	4841.2
1971	48	8299.2
1970	45	7780.5
1969	43	7434.7
1968	40	6916.0
1967	45	7780.5
1966	43	7434.7

Source: Statistical Abstract and Statistics of Foreign Trade of Syria, various issues, Central Bureau of Statistics.

Appendix 1.A

Table 73.

Balance Sheet for Sheep and Goats

Year	Slaughter Sheep	Goats & Kids	Disappearance Carcass, MT[a]
	000 head		
1977	1275	84	55174
1976	1163	61	49143
1975	1038	43	42994
1974	722	60	32186
1973	1665	56	67981
1972	1496	59	61739
1971	1715	44	68985
1970	1585	58	65070
1969	1359	42	55206
1968	1273	52	52672
1967	1190	107	53664
1966	1466	118	65063
1965	1212	98	53824
1964	1156	91	51149

[a]Conversion live to carcass for sheep and lambs 0.5 and for goats and kids 0.42.

38/28 kg/sheep   75.8 kg/goat

Source: (Central Bureau of Statistics), Statical Abstract and Statistics of Foreign Trade of Syria, various issues.

Appendix 1.B

FAO Elasticities, Trend Factors

and Consumption Function Forms

    The commodity demand projections in section 1.4 were developed
by (a) projecting the increase in per capita consumption for 1985 and
2000 and then (b) multiplying the projected per capita level by projected
population for 1985 and 2000. Consumption expenditure elasticities
and projected total consumption expenditures for 1985 or 2000 were used
in the appropriate function to project per capita consumption. The
particular functions (Appendix 1.B Table 1) are associated with different
types of foods (Appendix 1.B Table 2). For example, elasticities for
several meat items, eggs, fish, skimmed milk, cheese, butter, and animal
fats and oils were estimated from logarithmic function (1) in Appendix 1.B
Table 1 providing a constant elasticity coefficient. That is, a one
percent increase in expenditures was assumed to result in a constant percentage
increase in consumption per capita at any income level. In contrast,
elasticities become increasingly more inelastic as consumption and expenditures
increase for the other three functions in Appendix 1.B Table 1. The most
extreme case is function number (4), log-log-inverse, where a saturation
level is reached at some level of expenditure and then consumption turns
downward as income continues to rise. This function was used only for wheat
and the "all cereals" category in the SAR projections. Other commodities'
consumption functions are fitted with functions number (2) and number (3)
where the rate of consumption declines as income increases but a saturation
point is not reached.
    The actual projected changes in per capita consumption levels are
obtained from the relations under the "Increase in Per Capita Demand"
heading on the right-hand-side of Appendix 1.B Table 1. Trend adjustments
are made after the 1985 projection is made and then again for the 2000
projection if required. Note the trend factors in Appendix 1.B, Table 2
where, for example, poultry meat consumption was projected to increase
at an annual compound growth rate of 1.0 percent between 1975 and 1985
in addition to the effect of increased expenditures expressed through
relation 1.B Appendix 1.B Table 1. Then, poultry meat consumption
declines at 0.9 percent annually, in addition to expenditure effects, from
1985 to 2000.
    FAO developed the elasticities used for their Syria projections
from world-wide data on countries in a similar stage of development.
Future household consumption surveys in Syria could be structured to
obtain data necessary to provide elasticities of consumption specifically
for Syria.

Appendix 1.B Table 1. <u>Nature of the Demand Functions Selected for the Projections</u>

Function	Elasticity coefficient η	Increase in Per Caput Demand
A		**B**
(1) Logarithmic $\quad \log_e y = a + b \log_e x$	b	$\log_e \frac{y^1}{y} = \eta \, \log_e \frac{x^1}{x}$
(2) Semi-logarithmic $\quad y = a + b \log_e x$	$\frac{b}{y}$	$\frac{y^1}{y} - 1 = 2.3026 \, \eta \, \log_{10} \frac{x^1}{x}$
(3) Log-inverse $\quad \log_e y = a - \frac{b}{x}$	$\frac{b}{x}$	$\log_{10} \frac{y^1}{y} = 0.4343 \, \eta \, (1 - \frac{x}{x^1})$
(4) Log-log-inverse $\quad \log_e y = a - \frac{b}{x} - c \log_e x$	$\frac{b}{x} - c$	$\log_{10} \frac{y^1}{y} = \frac{\eta}{1 - \frac{x}{x_M}} \left[0.4343 (1 - \frac{x}{x^1}) - \frac{x}{x_M} \log_{10} \frac{x^1}{x} \right]$

x, y and η refer respectively to per caput Gross Domestic Product or Private Consumption Expenditure, per caput demand and elasticity coefficient at the base period; x^1 and y^1 refer to the corresponding values at the end of the projected period. In function (4) there is an additional parameter, which is represented by x_M, corresponding to the value of GDP or Private Consumption Expenditure, for which the maximum level of consumption is reached. The coefficient 0.4343 (or its inverse, 2.3026) corresponds to the transformation of decimal into natural logarithms.

Source: FAO, Agricultural Commodities--Projections for 1975 and 1985, Vol. II, Rome 1967, p. 34.

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Appendix 1.B Table 2

FAO Elasticities and Trend Factors Used to Project Demand

for Syria to 1985 and 2000

No.	Commodity	Expenditure Elasticity	Function No.[a]	Trend Factors	
				75-85 Percent	85-2000 Annually
1.	Cereals	.21	4		
2.	Wheat	.20	4		
3.	Rice Paddy	.40	2		
4.	Maize	.10	2		
5.	Barley	.00	-	-1.9	-0.6
6.	Oats	NA	NA		
7.	Millet-Sorghum	.00	-		
8.	Other Cereals	NA	NA		
9.	Roots & Tubes	.30	2		
10.	Potatoes	.30	2		
11.	Sweet Potatoes	NA	NA		
12.	Cassava	NA	NA		
13.	Yams	NA	NA		
14.	Plantains	NA	NA		
15.	Other Roots	NA	NA		
16.	Sugar Products	.46	3	0.2	
17.	Sugar Cent Raw	.45	3	0.2	
18.	Sugar Non-Cent	NA	NA		
19.	Other Sugars	.70	2		
20.	Pulses-Nuts-Seed	.47	2	-0.6	-0.6
21.	Pulses	.40	2	-1.2	-1.2
22.	Tree Nuts	.60	2		
23.	Oil Crops	.50	2		
24.	Vegetables	.50	3		
25.	Fruits	.42	3	0.2	-0.1

Appendix 1.B Table 2 Continued.

No.	Commodity	Expenditure Elasticity	Function No.[a]	Trend Factors 75-85 Percent	Trend Factors 85-2000 Annually
26.	Oranges-Tangerines	.60	2	2.8	-1.5
27.	Lemons-Limes	.40	2	-0.7	-0.9
28.	Other Citrus	NA	NA		
29.	Bananas	.40	2		
30.	Other Fruits	.40	3		
31.	Meat and Offals	1.06	2	0.3	-0.8
32.	Beef and Veal	1.20	1		
33.	Mutton-Lamb	.90	2		-1.0
34.	Pig Meat	NA	NA		
35.	Poultry Meat	1.50	1	1.0	-0.9
36.	Other Meat	.60	1		
37.	Offals	.60	1		
38.	Eggs	1.20	1		-1.1
39.	Fish	.99	1		
40.	Finfish Fr-Fz	.90	1		
41.	Finfish Processed	1.10	1		
42.	Crust-Mollusc	NA	NA		
43.	Other Aq an Pl	NA	NA		
44.	Whole Milk	1.00	2		
45.	Skimmed Milk	.80	1		
46.	Cheese	.80	1		
47.	Fats and Oils	.42	3		0.5
48.	Butter	.50	1		
49.	Vegetable Oils	.40	3		0.6
50.	Animal Oil Fat	.40	1		

Appendix 1.B Table 2 Continued.

No.	Commodity	Expenditure Elasticity	Functions No.[a]	Trend Factors 75-85 Percent	85-2000 Annually
51.	Spices	.60	2		
52.	Stimulants	.54	2	-0.4	
53.	Cocoa Beans	1.00	2		
54.	Coffee	.50	2		
55.	Tea	.50	2	-0.7	
56.	Other Stimulants	NA	NA		
57.	Miscellaneous Food	NA	NA		
58.	Alcoholic Beverage	1.00	2		
59.	Wine	1.20	2		
60.	Beer	1.00	2		
61.	Other Alcoholic	1.00	2		
62.	Non-Alcoholic Beverage	NA	NA		

[a] 1 logarithmic, 2 semi-log, 3 log-inverse, 4 log-log-inverse

Source: Unpublished FAO demand projections for Syria to 1985 and 2000 as of 1978.