# A Study of the Production and Marketing of Vegetables in the Tripoli Area (LAR)

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#### ABSTRACT

This study was conducted in the latter part of 1973 to identify and find out feasible solutions for the major production and marketing problems facing vegetable growers in the Tripoli area. One-hundred and ten farmers from Ben-Gashier, Al-Azizieh, Tajoura, and Azzahra areas around Tripoli were interviewed personally and asked to fill out a questionnaire concerning the various objectives of the study. It was found out that all sampled farmers grew vegetables. However, different farmers allocated different areas to the production of vegetables. Tomatoes were the most profitable crop due to the existence of a processing industry and a fixed price for tomatoes by the government. The study also revealed that most farmers got their vegetable seeds from abroad and that they were not keeping any farm account records. Thalatha wholesale market in Tripoli was the main marketing outlet for the great majority of the farmers. Besides, it was found out that grading, cleaning and packaging of vegetables before marketing them have an increasing effect on the prices received by the farmers. Nevertheless, farmers expressed concern about the low fixed prices for their crops and were in favor of competitive prices to be determined by the forces of supply and demand.

#### INTRODUCTION

The present study is the outcome of another previous study which was conducted in 1973 regarding marketing of vegetables at Thalatha market in Tripoli. The major emphasis in that study was on the main problems of vegetable marketing from the point of view of the middle-man operating at Thalatha market. However, it was realized that the study fell short to the extent that farmers' points of view regarding those problems were not taken into account. Therefore, the current study was undertaken during the latter part of 1973 in order to cover the farmers' points of view on those issues.

The prime objective of this study was to identify and find out feasible solutions for the major production and marketing problems facing vegetable growers in the Tripoli

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area. Identification of these problems as well as finding out the proper solutions for them will be invaluable for both the farmers and consumers. The farmers should be able to judge which is the most profitable crop to produce and what are the proper marketing outlets. This will certainly contribute to raising their incomes and thereby increasing their standards of living. On the other hand, the consumers will be provided with a better quality produce at reasonable prices.

#### SAMPLING PROCEDURE

To meet the above-mentioned objectives, 110 farmers, from Ben-Gashier, Al-Azizieh, Tajoura, and Azzahra areas around Tripoli were randomly selected and constituted the sample for this survey. They were interviewed personally in the latter part of 1973 and asked to fill out a questionnaire especially prepared for the study. The responses of the sampled farmers to the various questions are analyzed and presented in this report.

#### ALLOCATION OF LAND AREA FOR VEGETABLE GROWING

The responses of the sampled farmers to the questions regarding the area planted with vegetables and the types of vegetables grown. Tables 1 and 2 below provide the requisite information.

Table 1 Areas allocated for vegetable growing

Area (hectares)	Number of farmers	Percentage
Less than 2	34	31%
2-3	37	34%
3.1-5	17	15%
more than 5	22	20%
Total	110	100%

Table 2 Areas allocated to the various vegetables by type

Vegetable	Number of respondents			
	With one hectare or less	With 1.1-3 hectares	More than 3 hectares	Total
Tomato	46 (57.5%)	23 (28.8%)	11 (13.7%)	80 (100%)
Water melon	50 (65.8%)	22 (28.9%)	4 (5.3%)	76 (100%)
Onion	51 (91%)	5 (9%)	_	56 (100%)
Pepper	37 (95%)	2 (5%)	_	39 (100%)
Potatoes	25 (71.4%)	9 (25.7%)	1 (2.9%)	35 (100%)
Lettuce and other vegetables	23 (67.6%)	(32.4%)	=	34 (100%)

Table 1 indicates that about one-third of the farmers allocate less than 2 hectares to vegetables. Another one-third allocate between 2–3 hectares; while the remaining one-third allocate more than 3 hectares of their farms to vegetable growing.

Table 2, however, shows that the greatest number of farmers, 73% grow tomatoes, followed by watermelon 69%, onions 51%, pepper 35%, potatoes 32%, lettuce and other minor vegetables 31%. It is also clear from Table 2 that a little more than one-half of the tomato growers allocate one hectare or less to this vegetable. Also a little less than one-third of the tomato growers use between one and three hectares; while the remaining farmers use more than 3 hectares for this crop. Similarly, about two-thirds of the farmers who grow watermelon allocate one hectare or less for this vegetable. The majority of farmers who grow other vegetables such as onions, pepper, potatoes, lettuce, and some of the minor vegetables, allocate one hectare or less for these crops. This is due to the fact that farmers earnings from tomatoes and watermelon were the highest. In other words, it was reported by more than 50% of the sampled farmers that tomatoes and watermelon were the most profitable crops. Next in order of importance from the farmers' points of view were onions, pepper, potatoes, lettuce, and other vegetables, respectively.

Easy marketing of these crops along with the higher income obtained tempt the farmers to expand the area devoted to these various vegetables, as was indicated by their responses. The higher demand for tomatoes due to the existence of processing industry as well as the fixed price by the government encourage the farmers to expand area under this crop. About 58% of the sampled farmers reported producing tomatoes for the processing industry. On the contrary, lack of processing industries for potatoes, onions, and other vegetables might not increase the demand for these vegetables to the same extent as in case of tomatoes and thereby reducing the incentive of the farmers to expand areas devoted to these crops.

#### PRODUCTION OF VEGETABLES

### 1. Seed production

Our data further show that the majority of the farmers (about 76%) get their seeds from private seed merchants who in turn import vegetable seeds from abroad. Some of the farmers, however, get the seeds (watermelon and potato seeds) through agricultural cooperatives which also import seeds from foreign countries. Still, another group of farmers get their seeds locally from the Ministry of Agriculture; while another minority of the farmers raise their seeds on their own farms. Nevertheless, for the maintenance and improvement of the quality of vegetables, it is essential that some arrangements for the supply of improved seeds locally should be encouraged. This could be accomplished through agricultural cooperatives as was suggested by the majority of the sampled farmers.

#### 2. Costs of production

The majority of the farmers reported that the rising prices of the inputs lead to a continued increase in their costs of production. The important inputs were listed, in order of relative costliness as, machinery, irrigation, fertilizer, and insecticides, respectively. Consequently, it was felt by the farmers that these inputs could be provided

by cooperatives at lower prices. Besides, farm labor which was reported as the most costly input cannot be provided by the cooperatives. The remaining few farmers, however, were not in favor of cooperative organizations. This is probably due to the fact that they might not have been aware of the advantages of the agricultural cooperatives. Even if they are aware, they might have lost the interest because of other reasons such as disorganization, influence, etc.

#### 3. Farm records

As for farm account records regarding production and marketing of various crops, 15% indicated that they were keeping these records. The remaining 85% who were not keeping any records gave the following reasons: (i) Illiteracy (ii) Lack of interest (iii) Too busy to keep any records.

#### MARKETING OF VEGETABLES

Our study indicates that 99% of the farmers sell their vegetables at Thalatha whole-sale market in Tripoli. The remaining one percent sell their vegetables at local markets in their vicinity, or direct to the consumers at the farm gate, independently of any middleman activities.

However, 53% of the sampled farmers preferred to sell their produce to the middleman directly, who in turn will sell it at his own. Thirty-three percent preferred to sell their vegetables through the middleman on a commission basis without a contract (The way it is being conducted now). The remaining 14% preferred to sell the vegetables through the middleman on a contract basis since this would guarantee the sale of the crop on a fixed commission basis, regardless of the volume sold or the type of vegetables.

Nevertheless, the majority of the sampled farmers (95 percent) were in favor of marketing their produce through agricultural cooperatives.

As for the major costs of marketing, the farmers pointed out that transportation costs, labor, spoilage of vegetables due to the lack of adequate storage facilities and the relatively high middleman's commission, respectively, were the major items of the marketing costs.

The major marketing problems facing the farmers were identified as: (1) lack of adequate storage, (2) lack of transportation facilities (3) lack of knowledge about prevailing wholesale prices along with the low fixed prices for vegetables.

Spoilage of vegetables was highest in case of tomatoes due to their perishable nature. However, losses in case of other vegetables should not be ignored. The degree of damage varies according to the type of vegetable, method of transportation, type of packaging, and various handling practices.

#### SERVICING OF VEGETABLES BEFORE MARKETING

Grading, cleaning, and packaging were the major services performed on vegetables prior to marketing. As for grading and cleaning of vegetables, 60% of the sampled farmers grade their vegetables before marketing. The remaining 40% did not grade or clean their vegetables. Grading was based on size, color, variety, and quality of the

produce. Cleaning on the other hand, involves removing of dust, dry leaves and rotten stuff.

Packing of vegetables (putting in wooden crates or boxes) was done by 64% of the farmers. The majority of farmers who package their vegetables use boxes that belong to the middleman. By providing this service to the farmers, the middleman will make sure that the vegetable will be sold through him and thereby increasing his commission.

Those farmers who did not service their vegetables before marketing them provided the following reasons for not doing so: (1) Non-acceptance by the consumers, especially removal of inedible parts such as removal of leaves from carrots, turnips, and raddish because the presence of leaves shows the relative freshness of the produce, (2) high costs involved in terms of time and labor.

The great majority of farmers 96% reported the desirability of establishing centers for grading and packaging services. The remaining few farmers, 4%, were not interested in such centers and believed that such services will be costly due to the fact that their production was not adequate for this.

## PRICE CONTROL

When asked about the Price Control Committee and the role it might play in improving the prices of their vegetables, 76% of the sampled farmers were of the opinion that the controlled prices were low and not in the interest of the farmers. Consequently, they were in favor of competitive prices to be determined by the forces of supply and demand.

However, when probed further, about 36% of the farmers were not in favor of price control at all. Another 40% wanted the fixed prices to be raised, and asked for consideration of the costs of production while fixing wholesale prices. The remaining 24% were not against price control, but suggested that the government should buy the unsold surplus and provide storage facilities for their crops.

#### CONCLUSIONS AND RECOMMENDATIONS

The prime objective of this study was to identify and find out feasible solutions for the major production and marketing problems facing farmers in the Tripoli area. Personal interviews were conducted with 110 farmers in the latter part of 1973. In light of the collected data and the previous analysis, we come to the following conclusions and suggestions:

- All sampled farmers, without exception, grow vegetables and about one-third of them put three hectares or more under vegetables. This indicates that vegetable growing in Tripoli area is a profitable business. Therefore, it is suggested that vegetable growers should be encouraged by providing various incentives to expand areas devoted to vegetables. This might be accomplished by providing the farmers with production inputs on a subsidized basis and other marketing services.
- 2. Since tomatoes were the most profitable crop due to the existence of a processing industry and a fixed price for tomatoes determined by the government, it would be much better if the fixed price is raised, as demanded by the farmers, to provide an incentive for them to expand areas devoted to this crop. This policy might give

- LAR a great chance to export fresh tomatoes as well as increase export of processed tomatoes. A similar policy should be adopted for expanding areas devoted to other vegetables such as onions; potatoes, etc.
- 3. Because most of the farmers get their vegetable seeds from foreign sources, it is thereby recommended that arrangements should be made to encourage vegetable seed production locally, whether through public or private sectors. This will increase the adaptability of seeds to local conditions and also guarantee the availability of seeds to the farmers in time.
- 4. It would be more economical and efficient if agricultural cooperatives supply the farmers with various production inputs such as machinery, fertilizers, insecticides, etc. Accordingly cooperatives should be encouraged and the farmers should be educated about the benefits of these cooperatives.
- 5. The study indicated that a large majority of the farmers, 85%, were not keeping any records for various reasons mentioned earlier. Therefore, it is recommended that the farmers should be trained to keep and use farm records since this would make farm business more efficient and profitable.
- 6. Our study also shows that the majority of the farmers sell their produce at Thalatha wholesale market in Tripoli through a middleman. It is therefore suggested that the middleman's commission should be fixed. We are in favor of fixed commission rates for specific varieties and quantities of vegetables. However, the majority of the sampled farmers were of the opinion that marketing should be done through agricultural cooperatives which should therefore be promoted.
- Since spoilage of vegetables is a major factor that increases the marketing costs, it is recommended that adequate cold storage and refrigeration facilities should be provided.
- 8. The study further shows that grading, cleaning, and packaging of vegetables before marketing have an increasing effect on the prices which farmers receive. It is therefore suggested that some organizations such as the Extention Service of the Agricultural cooperatives should start a program to educate the farmers about various standards and grades of vegetables as well as packaging and cleaning of vegetables before marketing them.
- 9. It was also revealed by the study that lack of knowledge about prevailing wholesale prices for vegetables was one of the marketing problems confronting the farmers. Thus, by announcing daily prices prevailing at Thalatha market on radio and television, might contribute to solve this problem.
- 10. Finally, we suggest that price control measures should be revised in such a way as to guarantee that prices which farmers are getting are high enough to cover their costs of production along with a reasonable rate of profit. However, the consumer's interest in getting good quality products at reasonable prices should not be ignored, even if this requires providing subsidized inputs to the farmers.

# **ACKNOWLEDGEMENTS**

We are grateful to Dr. Akram Steitieh and Dr. A. Bassit, former staff members, Faculty of Agriculture, University of Tripoli, for their help in designing the question-naire for this study. We would also like to thank the 1973 third year Agricultural Economics students and Mr. A. Fellah (Research assistant in A.R.C.) for their assistance in collecting the data from the farmers.

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دراسة عن انتاج وتسويق الخضر وات في منطقة طرابلس بالجمهورية العربية الليبية

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# المستخلص

لقد قمنا بهذه الدراسة في صيف عام ١٩٧٣ للتعرف على المشاكل التي تواجه المزارعين في منطقة طرابلس في انتاج وتسويق خضروانهم وايجاد الحلول المناسبة لها . واقد اخترنا مائة وعشرة مزارعا من بن غشير والعزيزية وتاجوراء والزهراء المجاورة لطرابلس وطلبنا منهم تعبأة استبيان خاص أعد لهذه الدراسة .ودلت نتائج الدراسة على أن جميع المزارعين يزرعون الخضروات ولكن بنسب متفاوتة . ويبدو أن الطباطم هي أكثر الخضروات فائدة بالنسبة للمزارعين وذلك بسبب وجود صناعة لتعليب هذا المحصول وتثبيت سعره من قبل الحكومة . ودلت الدراسة أيضا على أن معظم المزارعين قد حصلوا على بذور الخضروات اللازمة من مصادر أجنبية وأنهم لم يحفظوا سجلات لمزارعهم . كا وأن سوق الثلاثاء العمومي بطرابلس كان أم مكان لتسويق الخضروات العظم المزارعين . وبالاضافة إلى هذا ، فلقد دلت الدراسة على أن تنظيف الخضروات وتصنيعها ووضعها في أكياس قبل تسويقها يضمن سعراً أفضل لها . وعلى الرغم من هذا كله ، فلقد شعر المزارعون بأن الأسعار المشتة لخضراوتهم كانت قليلة نسبيا وأنهم يفضلون نظام السعر الحر الذي تحدده قوى العرض والطلب في السوق .