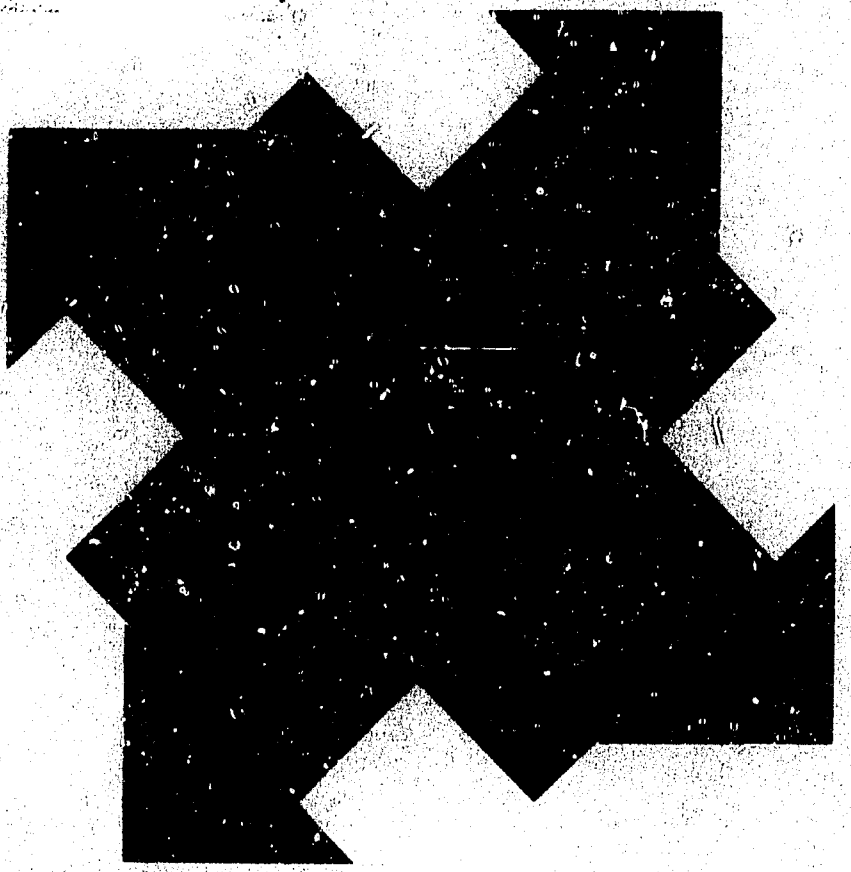

SPECIAL REPORT

TASKS 040-050-060

MATHTECH, INC.

The Technical Research
and Consulting Subsidiary of
Mathematica, Inc.

Mathtech The Technical Research and Consulting Division of Mathematica, Inc.

SPECIAL REPORT

TASKS 040-050-060

PRODUCTION, THE PRIVATE SECTOR AND VILLAGE FLOCKS

March 14, 1980

I. INTRODUCTION

Among the objectives of the Poultry Improvement Project has been the determination of the needs of the Egyptian Poultry Sector regarding targeted levels of domestic production of poultry products, optimal allocation of resources, and provision of quality baby chicks to the village flocks. Previous Special Reports by the MATHTECH team have dealt specifically with each of the objectives. This Special Report addresses recent developments in the Egyptian Poultry Sector which provide opportunity to make significant and rigid progress toward achieving each of these objectives.

II. BACKGROUND

As was noted in the Special Report on Tasks 020-030, "DATA BASE & SECTOR ANALYSIS" (March 1980), the Special Report on VILLAGE FLOCKS (June 1979), the Special Report on POULTRY HEALTH (June 1979), the FIRST INTERIM REPORT ON THE POULTRY IMPROVEMENT PROJECT (March 1979), and the SECOND INTERIM REPORT (November 1979), several major problems require action and solution.

1. Native hatcheries are provided eggs from native flocks, determine which are fertile, and then hatch those eggs for resale to the native flock owners. These eggs are generally of low quality and most likely are diseased. The chicks ultimately hatched are not

generally of good genetic quality, which in combination with other conditions in the villages, tends to cause an excessively high mortality rate in the village flocks (at least 30-40%, perhaps over 50%). In addition, the hens have a lay rate lower than genetically sound and disease-free stock. As a result, the village flock owner experiences a lower income and a much higher cost of production than should be the case. In our Special Reports on Poultry Health and Village Flocks, the single most critical element cited by our poultry experts was the problems caused by not using disease-free chicks. Most of the chicks being used were being hatched from recycled village eggs rather than eggs from "clean hatcheries".

2. There are approximately 2,500 small private broiler growers licensed by the Government. However, only half of these are in production, according to MATHTECH's recent investigations. These growers have not gone back into production because of the uncertainty of being able to recover costs of production, let alone realize a small profit for their efforts. Their unused facilities represent an extremely valuable resource. However, to date, attempts to bring them back into production generaly have been unsuccessful.

3. During 1979, the Ministry of Supply imported approximately 20,000 metric tons of frozen poultry meat from the United States, plus an unknown quantity from Greece and other countries. The imports from the United States were purchased with AID's Commodity Import Program funds. Such funds could have been used to purchase commodities such

as cereal grains, which are urgently needed for other programs such as poultry, livestock, dairy and the like. To the extent poultry imports could be replaced by domestic production, and C.I.P. funds could be otherwise utilized to overcome the cereal grain shortages.

4. During 1979, the GPC converted from Lohman broiler parent stock to Hubbard. This conversion resulted in a substantial increase in the rate of lay of hatching eggs, which ultimately caused chick supplies to exceed the needs and capacity of the GPC broiler production units. Attempts to motivate the small private producers to go back into production have not met with great success, and other productive uses of the Hubbard chicks are limited. These hatching eggs, or baby chicks, could perhaps be exported. However, they represent a valuable resource which Egypt could use to increase domestic poultry production and thereby reduce reliance on imported frozen poultry meat. Also, continued operation of the hatcheries at current levels requires use of resources which could be otherwise used. Disposing of the parent stock would represent a significant loss and should not be considered. A realistic plan which allows the current production of Hubbard chicks to be utilized to increase poultry production would seem to best fit Egypt's needs.

III. CURRENT SITUATION

1. At the current rate of production, the GPC Hubbard breeder hens produce up to 100,000 to 300,000 baby chicks per week more than can be efficiently handled in GPC's present broiler production

facilities. A portion of these chicks will be sold to the large private sector producers such as Egypco, Ismalia Food Company, and Cairo Poultry Company. However, the quantities which can be sold to such producers are not certain and depend on the production plans of those producers and arrangements they may already have with other suppliers.

2. If used only for poultry meat production, the Hubbard chicks reach slaughter weight at approximately eight weeks. However, the Hubbard hens are also capable of providing table eggs if permitted to reach laying age at approximately twelve weeks. Their rate of lay may not equal that of special purpose layer breeds, but their laying rate should at least equal that of the native Baladi, as an example. Then when slaughtered, the Hubbard hens will yield a considerably larger volume of poultry meat. Being a larger and stronger bird, the Hubbards should be capable of equalling least the present survival rate of the village-layed recycled chicks now being supplied by the native hatcheries to the villages.

IV. CONCLUSIONS

1. If a feasible program for utilizing the excess supply of Hubbard chicks is developed, waste of scarce resources will be minimized.

2. If the chicks are placed in production in Egypt rather than exported, it will reduce the present reliance on imported poultry meat.

3. Placing the Hubbard chicks in village flocks should significantly improve the general level of poultry health and diminish the genetic deterioration of the chickens in the village flock sector. Another benefit would be an increase in the amount of poultry meat available in the villages as the Hubbards are grown to full size.

4. The valuable, but currently unused, small broiler production units could be quite effectively utilized to increase total domestic production of poultry and improve the private sector's share of this domestic production with an appropriate management plan.

V. STRATEGY

1. With Egyptian resources now available, utilize the excess Hubbard chicks to accelerate production of poultry meat in Egypt. This option is preferable to increasing the demand on already strained hard cash resources for the purchase of new facilities and equipment outside of Egypt.

2. A limited number of Hubbard chicks should be introduced on a test basis into selected native hatcheries and village flocks. This would provide an opportunity to determine the feasibility of using these resources to improve poultry health and to increase the availability of poultry meat at the village level.

3. If these alternate programs lead to the desired results, then the

size of the parent stock of Hubbards should be maintained and these programs expanded.

VI. RECOMMENDED PROGRAMS

A. Select a Governorate in Which This Test Program for Village Flocks May be Tested.

1. The Governorate selected should be one within reasonable distance of a GPC hatchery. This hatchery could supply Hubbard chicks to the native hatcheries within the selected Governorate, and also assist in effectively regulating activity within these native hatcheries.

2. Develop a program with the selected Governorate and/or Extension Service and/or ORDEV and/or Agrarian Reform villages.

3. Sanitize the native hatchery to ensure that it will not contaminate the Hubbard eggs. The alternative to this would be to bypass the native hatchery and supply baby chicks directly to the villages. This last option would probably create a hardship on the native hatchery and, therefore, is not recommended.

4. Establish a monitoring program to compare the results of supplied feed versus standard village flock feed materials. This would involve determining mortality, conversion (as applicable), and finished weights, egg production (hens), and other measures for comparison with local birds.

B. Create a New Egyptian Company or Master Central Cooperative for "Contract" Production.

1. A new Egyptian company or master central cooperative for contract production would be formed. This company would be comparable with Egypco, CPC, or Ismalia. Likely partners would include GPC, private Egyptian individuals or firms, and a non-Egyptian poultry firm such as Central Soya, Inc. (a major United States contract poultry producer), or Gold Kist (a major United States farm cooperative with strong poultry production efforts.

2. This new company would:

a. Provide all the necessary materials such as chicks, feed, and vaccines.

b) Provide supervisory services such as veterinary and equipment service.

c) Contract for the production of broilers with a guaranteed return to the small private sector producer. This would bring a number of licensed units back into operation.

d) Arrange with the Ministry of Supply to market the production of this poultry through the Ministry's stores.

e) Monitor the market and, in periods when supply is high, process the poultry through the slaughterhouse and place the finished product into refrigerated or or frozen storage until the market can accept the poultry at reasonable wholesale prices.

NOTE: CENTRAL SOYA, INC. has expressed possible interest in such a venture, and is ready to discuss these possibilities with Egyptian authorities. While GOLD KIST had indicated interest in the past, it is not believed that their current circumstances would allow them to be involved in the near future. A certain amount of financing is available from Development Banks in Egypt and possibly from World Bank sources abroad, with the provision that a viable United States firm, such as CENTRAL SOYA or GOLD KIST, be involved in such a new Egyptian company.

VII. SUMMARY

The increased productivity of the Hubbard strain of broiler breeders provides an opportunity to make significant improvements in private sector and village flock production. Based on discussions to date, it appears that these alternatives can be put into operation in a relatively short period of time.

(PIPSPREP)