PN-ABA-244

AMERICAN AGRICULTURAL ASSOCIATES, INC.

AGROINDUSTRIES

INVESTMENT AND TRADE OPPORTUNITIES

IN TURKEY

REPORT OF A MISSION

SPONSORED BY

U.S.

TRADE AND INVESTMENT PROGRAM

November 26, 1982

AGROINDUSTRIES

INVESTMENT AND TRADE OPPORTUNITIES

IN TURKEY

REPORT OF A MISSION

SPONSORED BY

U.S.

TRADE AND DEVELOPMENT PROGRAM

Donald M. Taylor
American Agricultural Associates, Inc.
1750 K Street, N.W.
Suite 380
Washington, D.C. 20006

November 26, 1982

TABLE OF CONTENTS

1.0.	Executive Summary	i
2.0.	Introduction	1
3.0.	Conclusions and Recommendations	
	Investment and Trade Opportunities	2
	State Intervention in Agricultural Sector	3
	Need for Formal American/Turkish Business To Business Relationship	5
4.0.	Agroindustries Investment Climate	
	Economic, Political, Demographic Factors	7
	Agricultural Situation	8
	Investment Conditions	10
5.0.	Investment and Trade Opportunities by Sector	14
	Livestock and Products	15
	Poultry	18
	Feed Manufacturing	20
	Soybean Crushing	21
	Seeds	23
	Fruits, Vegetables, Nuts	24
	Equipment Sales and Related Opportunities	27
ANNEX I		
	Pre-Investment Profiles	
	Integrated Broiler Production	29
	Integrated Broiler Production	31
	Frozen Food Factory	33
	Soybean Processing Plant	36
	Integrated Livestock Industry	38
	Agroindustry Demonstration Project	39
	Beef and Dairy Sector Study	41
ANNEX II		
	Key Contacts	
	Companies Expressing Interest in Joint Ventures	42
	Government Officials	45
ANNEX III		
	U.S. Company Lists	46

AGROINDUSTRIES

INVESTMENT AND TRADE OPPORTUNITIES

IN TURKEY

1.0. EXECUTIVE SUMMARY

2.0. Introduction

The Consultant participated in a U.S. Trade and Development Program Investment and Trade Mission to Turkey in October, 1982. The Mission members also included representatives from three American agricultural trade associations, a USDA staff person, a poultry expert and was led by Ronald E. Bobel, Assistant Director of TDP. The mission identified numerous fields of interest for potential U.S. agroindustries investments, as well as a number of constraints. Over-all mission conclusion was that Turkey presents some of the most promising opportunities to be found for international agroindustried investment.

3.0. Conclusions and Recommendations

The mission concluded that the chief single constraint to promotion of greater U.S. commercial involvement in Turkey is the continuing misperceptions on the part of U.S. business concerning Turkish political, economic and investment conditions. A series of TDP sponsored initiatives for helping correct this situation were suggested. Another problem that was identified was the continued state intervention in certain aspects of the agricultural sector, although the government is moving to resolve this. It is recommended to speed up certain policy measures that will help increase the inducement for American investors to enter certain industries. The recommendation is addressed specifically to the deemphasis of agroindustrial operations on the part of the State Economic Enterprises, changes in pricing of soybean and soybean products, and increasing the role of the private sector in manufacture of poultry vaccines and in the production and marketing of seeds. It was also concluded that there is a need for establishment of some sort of Turkish investment and trade promotion office in the U.S.. It is recommended that this be overseen by the Turkish and American private sector rather than government.

4.0. Economic, Political, Demographic Factors

Turkey has effected an impressive political and economic turnaround during the past two years. A new economic development policy has been instituted which instead of being essentially inward looking and relying on import substitution and government intervention turns toward reliance on the private sector

and on market and pricing signals to allocate resources. Part of this new direction is the inducement of greater foreign participation in the economy. Foreign investment approval procedures have been greatly simplified and are being applied in a very liberal fashion. There are numerous Turkish business groups willing and able to engage in joint ventures with American firms. The agricultural and agroindustrial sectors have become priority areas for development under the new economic policies. Exports are also being emphasized. The policies thus far have been successful in lowering the rate of inflation, inproving agricultural and industrial productivity and significantly expanding exports.

5.0. Investment and Trade Opportunities by Sector

One of the major attractions for investors in the agricultural sector is the potential for exports to the Middle East. Turkey's agricultural exports to North Africa and the Middle East doubled between 1980 and 1981 and will probably at least double again in 1982. Areas of opportunity include livestock production, processing and marketing domestically and in the Middle East, including dairy processing, beef cattle and lamb feeding and integrated poultry operations, with all of these combined with feed manufacturing. There is also some opportunity for exports of manufactured feed to the Middle East.

Soybean crushing and the manufacture of various soy products also represent an opportunity. About 100,000 tons of soybean oil are imported annually and there will be a very large demand for soybean meal as the poultry industry grows. There is very little domestic soybean production although the government has started promoting the local industry.

The seed industry represents one of the most promising sectors for foreign investment, provided the government is willing to create conditions for a viable private seed sector.

In the category of fruits, vegetables and nuts, there are opportunities in production and export of both fresh and processed products. Constraints that could be usefully addressed by American technology and investment include generally poor quality and high price of packaging materials; inadequacy of transport and transport facilities; and lack of sophisticated technology in the food processing industry, particularly in the area of quality control.

Opportunities also exist for sale of various types of equipment to Turkey, including food processing and packaging machinery, the larger and more sophisticated farming equipment, irrigation needs of all types and grain storage, handling and processing equipment. In some cases, successful sales will require some flexible combination of direct marketing, licensing and joint ventures.

AGROINDUSTRIES

INVESTMENT AND TRADE OPPORTUNITIES

IN TURKEY

2.0. INTRODUCTION

2.1. The Consultant, Donald M. Taylor, President of American Agricultural Associates, Inc., was retained by the U.S. Trade and Development Program (TDP) as a member of an Agroindustries Investment and Trade Mission to Turkey in October, 1982. The mission was headed by TDP Assistant Director Ronald Bobel and also included several technical and industry specialists.

These were John Baize, Washington Program Manager, American Soybean Association; Dr. T.J. Vorachek, Regional Director, U.S. Feed Grains Council; Doyle Jacklin, representing American Seed Trade Association; and Dr. Robert Krueger, poultry specialist. James Ross, United States Department of Agriculture, also took part in the mission representing Foreign Agriculture Service.

Mission members spent approximately two weeks in Turkey, with visits to Istanbul, Ankara, Adana and Izmir. Members participated in the first Turkish American Business Conference in Istanbul, visited important farming areas, met with many of the major firms and business groups in Turkey and conferred with government officials including the Minister of Agriculture, head of the Agricultural Bank and the Deputy Prime Minister.

2.2. The Consultant's assignment was to serve as mission economist and agroindustries investment advisor, and to prepare the mission report and recommendations for TDP. The report that follows is prepared within the framework of TDP's primary objectives, which are to stimulate U.S. exports of goods, services and technology through promotion of U.S. investment abroad, in projects which must also promise to have a favorable effect on the host country's accomplishment of its development priorities.

This report draws heavily on the observations and conclusions of the mission members. Each mission member has, however, compiled a separate report covering his specific areas of interest in more detail. Copies of these individual reports are available on request from the U.S. Trade and Development Program, Department of State.

2.3. The mission identified numerous fields of interest for potential U.S. agroindustries investment. These ranged across a broad gamut of agricultural production, processing and marketing activities as well as various agricultural input industries. While

some investment constraints still exist in Turkey, these are by and large being rapidly dismantled under the present government.

The mission concluded generally that on any scale rating international agroindustries investment climate and potential, Turkey would occupy a position very near the top.

3.0. CONCLUSIONS AND RECOMMENDATIONS

3.1. Investment and Trade Opportunities

Turkey represents one of the most promising areas of opportunity in the world today for American agroindustrial investment, transfer of technology and sales of goods and services. Specific areas of opportunity include livestock and products, poultry, feed manufacturing integrated with the above, soybean crushing, seeds, horticultural products and equipment sales and related opportunities. Turkish business groups and the Turkish government are intensely interested in finding American partners in these areas and others.

The chief single constraint to promotion of greater American involvement in Turkish agroindustries is the continued misperception that Turkey is still an economic basket case and is basically hostile toward foreign investment. Neither point is valid today. There is also a widespread lack of information regarding agricultural sectors and specific opportunities within those sectors.

Recommendations

The U.S. Trade and Development Program should build on the base provided by this reconnaissance program to support a series of coordinated efforts which together will support increased involvement by American business firms in the Turkish agroindustrial sector. These efforts should include, but not necessarily be limited to:

Encouraging the U.S. Department of Agriculture, which also took part in the mission, to station an agricultural attache or counsellor in Turkey on a permanent basis. The establishment of such a position should greatly facilitate the flow of information to U.S. firms seeking Turkish business opportunities.

Providing support for an early 1983 Investment and Trade Mission to Turkey, led by Secretary of Agriculture John Block and with mission members consisting of CEO's and other senior executives of interested American agribusiness companies. The function of this mission should not be ceremonial--its purpose should be to bring together decision makers from American and Turkish firms who are seriously interested in establishing a base for doing business together. Secretary Block's role should be to open the door to top Turkish government policy makers and elicit their support. TDP can help organize the mission, provide funds for

an advance party and assist in recruiting American businessmen participants.

Inviting a group of Turkish businessmen and key government officials to take part in a reverse mission following the U.S. mission. While the Turkish businessmen would be expected to pay their own way, TDP should set up the itinerary and might consider paying the way for the government officials.

Sponsoring a sector study for the beef and dairy cattle sector. Purpose of the study would be to establish a base for involvement in the industry by U.S. investors as well as suppliers of various products, goods and services, including feed grains, breeding stock and equipment. Details are given in Annex I.

Participating in prefeasibility and/or feasibility studies of two model projects, by interested American companies, including assisting in finding the appropriate companies and providing half of the necessary study funds. The two projects suggested include a fully integrated poultry production, processing and marketing project; and a soybean crushing project. Further details are provided in Annex 1. If these projects can be successfully established in Turkey and are profitable, they will serve as an example for inducement of further U.S. investments there. The two projects also support each other, since without increased availability of soybean meal, the poultry project cannot be successful.

Helping establish a demonstration model for U.S. equipment, technology and management, probably in cooperation with the Overseas Private Investment Corporation. The design of such a model is also suggested in Annex 1.

Encouraging the U.S. Agency for International Development to reinstitute certain activities in Turkey. These activities should be designed to support Turkish private sector development in the agroindustries area, preferably with U.S. participation.

3.2. State Intervention in the Agricultural Sector

While it is recognized that the Turkish government has done an exceptional job in the institution and application of policies that reduce state intervention in the market process and shift economic emphasis toward greater reliance on the price mechanism to allocate resources, there needs to be a continued improvement in this process as it is applied in the agricultural sector. Specifically, the government should progressively deemphasize the role of the State Economic Enterprises and should proceed to rationalize certain pricing policies and procedures that represent constraints on the efficient development of some industries.

Recommendations

The following specific recommendations are made to the Turkish government:

The government should establish policies which will facilitate accelererated entry by the private sector and gradual withdrawal of State Economic Enterprises from agroindustrial enterprises, including livestock slaughter, dairy processing, feed manufacturing and oil seed crushing. Consideration should also be given to encouraging the private sector to play a more active role in grain handling and storage. Plans for TMO to invest in a soybean crushing plant and subsidiary activities in the Adana region should be withdrawn and the Turkish private sector encouraged to upgrade present oil crushing facilities or invest in new facilities, preferably with an American firm or firms that are capable of supplying the required technology.

The government, in its efforts to promote development of a soybean industry in Turkey, have instituted pricing policies which have the effect of penalizing the soybean processing industry in favor of the growers and feed compounders. Application of these policies is, however, fostering effects which are actually counterproductive. Because of the low regulated prices for meal and the inability to export at the higher world market price, crushers are evidently adding extraneous material to the meal thus seriously lowering its protein content and nutritional benefits to the poultry industry. Despite the favorable support prices, farmers are reportedly experiencing substantial delays in receiving payment from the government for their soybeans. Soybean pricing policies should be rationalized and greater reliance placed on market forces to provide price incentives at all levels of the soybean production/processing/marketing chain. At the same time, specifications governing soybean meal specifications and quality should be established and enforced by the government. It should also be recognized that while efforts should continue to promote local soybean production, the growth of the Turkish poultry industry and the realization of the industry's full potential in both domestic and export markets depends heavily on the availability of good quality soybean meal. Therefore, while local soybean development should not be deemphasized, soybean imports should be allowed to the levels required by the poultry industry while policies should be instituted that favor improvements in the private crushing sector. This will also provide some economic benefit in reducing imports of soybean oil.

Because of the importance of the poultry industry potential for providing animal protein to the people of Turkey as well as the possibility for development of poultry meat exports to the Middle East, constraints to the more rapid development of that industry should to the extent possible be removed. One such

constraint is the present government monopoly on manufacture and sale of poultry vaccines and the inadequate variety and quality of such vaccines, which has led to a black market for foreign vaccines in Turkey. The government should make it possible for private firms to produce vaccines under license in Turkey and until such time as such local supplies are adequate, should relax import restrictions on poultry vaccines.

Seed production and marketing is the remaining area where an excessive control of the industry by the government has resulted in an unnecessary deterrant to more rapid development of agricultural productivity. While moves have been made by the Ministry of Agriculture to liberalize various aspects of the official seed regime, these moves do not appear to go far enough. While the government should continue to exercise a reasonable degree of control over seed specifications and quality, it will be necessary to further liberalize seed import requirements, production and marketing restrictions and testing and variety registration requirements if a viable private sector seed industry that can make a genuine contribution to the productivity of the Turkish agricultural sector.

The above recommendations are not to be read as criticism of the current administration in Turkey. The government is proceeding to reverse numerous policies and procedures that had come to represent a drag on agricultural and agroindustries development. Such a reversal takes time--the purpose of this report is not to suggest that the above recommendations can be accomplished overnight, but to make constructive suggestions for government actions that will assist in inducing greater involvement by the U.S. private sector with the Turkish private sector in Turkish agriculture and agroindustries.

3.3. Need for a Formal American/Turkish Business to Business Relationship

While there is at present a great deal of interest, particularly on the Turkish side, in bringing American investment, technology, marketing and management skills to bear on Turkish agroindustries development, this interest is not adequately focused. There needs to be some formal mechanism established which will serve as the focal point for efforts to promote partnerships between U.S. and Turkish firms. This mechanism would probably be most effective in the form of an investment and trade office in the United States with a counterpart office in Turkey. This can be accomplished in a number of ways--as an official organ of the Turkish government, as a joint government effort between the two countries, or as a private sector business organization which may or may not be supported by one or both governments. Judging by similar efforts on the part of other countries, the most effective approach is probably one that is controlled

primarily by the private sector.

Recommendation

It is recommended that the Union of Chambers of Commerce and Industry and the American Turkish Society in cooperation with other appropriate nonofficial and official organizations and agencies in Turkey and the United States, work toward the establishment of a Turkish Investment and Trade Promotion Office in the U.S.

Such an office should work closely with official Turkish and U.S. government agencies including the Turkish Embassy in Washington, D.C. but should be an autonomous, business to business organization working with and representing private sector companies on both sides.

The role of such an office is to work with U.S. investors to acquaint them with investment conditions and specific agro-industries opportunities in Turkey; coordinate activities with various agencies of the U.S. government that are interested in fostering investment and trade between the U.S. and Turkey, such as Trade and Development Program, Overseas Private Investment Corporation, the Departments of Agriculture and Commerce, and others, so that the programs of these agencies can be effectively applied in Turkey; assist in Turkish/U.S. trade promotion; and serve as a source of investment related information for both sides.

4.0. AGROINDUSTRIES INVESTMENT CLIMATE

4.1. Economic, Political, Demographic Factors

Turkey has accomplished what can only be termed a near miracle during the past two years in turning around an economy that was nearly morabund and establishing a solid base for economic recovery.

Prior to the economic reform program put into place in 1980, Turkey was characterized by an inward-looking economy, a development policy that was oriented toward import substitution and emphasized industrial rather than agricultural growth and an attitude of suspicion if not outright hostility toward most foreign investment. The years following 1973 when world oil prices began to escalate saw the Turkish economy spiral into a seemingly hopeless downturn, with an external debt service ratio that rose from 14 percent in 1973 to 33 percent in 1977, growing unemployment, an industrial plant whose operating rate dropped to fifty percent of capacity, soaring inflation and growth rates that turned negative by 1979.

The worsening economic conditions and ensueing widespread civil disorder in 1978-80 led to a total rethinking of Turkey's basic economic orientation on the part of the government, which put into place in January, 1980, a radical new stabilization program which placed emphasis on stringent domestic economic measures, a greatly strengthened role for the private sector in the nation's economy, and reliance on export led growth tied to the forging of much closer commercial ties to the rest of the world.

The new policies were unable to function effectively, however, in the context of the civil strife that prevailed in Turkey. As a result, the military took control in late 1980. The depth of support for the country's new directions on the part of the Turkish citizenry was indicated by the overwhelming support given a new constitution institutionalizing the current administration in a referendum held in November, 1982.

Turkey has taken a definite turn for the better during the past two years. Growth in Gross Domestic Product during 1981 was 4.3 percent, compared to a negative growth rate in 1980. Inflation was brought down to less than 40 percent during 1981, compared with more than 100 percent during the previous year, and is forecast to drop below 30 percent for 1982. Exports have almost doubled, industry is operating at a higher proportion of capacity and domestic savings and investment are beginning to improve.

One of the most significant aspects of Turkey's new growth posture is its turn toward the Arab world. Turkish exports to the Middle East, particularly of foodstuffs, have increased dramatically over

the past two years. Turkish contractors are making large inroads into the region, with at least $10 billion in construction contracts already signed. As a Moslem country with a long history of involvement in the Middle East and a substantial productive capacity, Turkey has a competitive edge over many other Middle East suppliers.

Low labor rates and a progressive devaluation of the Turkish lira on almost a daily basis make Turkish products very competitive in world markets. Turkey also has a large domestic market, with a population of approximately 46 million and per capita GNP approaching $1,400.

Turkey occupies a position of great geopolitical significance for the United States. It is located at the junction of Europe and the Middle East, anchoring the eastern flank of NATO. Turkey is an associate member of the Common Market but enjoys increasingly close ties to the Middle East, acting for example as a major supplier of foodstuffs to both Iran and Iraq even though they are at war.

Turkey's land routes into the Middle East are another important factor in the growth of trade with the region. Turkey is bordered by Iraq and Syria on the south, Greece and Bulgaria on the northwest and the U.S.S.R. on the east and north. Turkish ports are located on the Black Sea, the Aegean and the Mediterranean.

Turkey has a total land area of about 781,000 square kilometers, of which about 280,000 are classified as agricultural. Climatic and topographical zones vary widely from subtropical in the south to Alpine in the east, from high mountains to extensive plains. Of the 8.2 million hectares of land which are classed as irrigable, some 2.6 million hectares are already irrigated.

4.2. Agricultural Situation

Turkey is one of that select club of half a dozen nations that can feed themselves and still produce a surplus of agricultural products for export. Substantial increases in production of many major crops occurred during 1960-79 despite the fact that the main thrust of government policy favored industry over agriculture.

The wide variety of agroclimatic zones and large area devoted to agriculture make it possible for Turkey to produce a broad range of temperate and Mediterranean climate crops. Despite this, cereals occupied 71 percent of the total cultivated area in 1980, with 85 percent of cereal land planted to wheat and barley. The industrial crops, sugar beets, oil seeds, cotton and tobacco acounted for nine percent of planted area; olives and grapes, eight percent; fruits and nuts, seven percent; vegetables four percent; pulses three percent and tea one percent.

Turkey's livestock population is one of the largest in the region. There are 16 million cattle and buffalo, 64 million sheep and goats and 55 million poultry. Most livestock are grazed, on

some 21 million ha. of natural pastureland.

Although exports of industrial products increased rapidly during 1981 and 1982, agricultural and agroindustries based products still make up almost three-quarters of total exports. Agricultural exports during 1981 increased 40 percent over 1980 to a record $2.5 billion.

Principal commodity exports by value included tobacco, $395 million; cotton, $348 million; filberts, $302 million; livestock and products, $345 million; pulses, $216 million; raisins, $130 million; and citrus, $110 million. Turkish agricultural exports to the Middle East during 1981 doubled in value, to $770 million. Important Middle Eastern markets for Turkish foodstuffs include Iraq, Iran, Egypt, Syria, Kuwait, Jordan and Saudi Arabia.

The European Community remains an important market for Turkish agricultural products, particularly nuts, dried fruit and tobacco. The Community in 1981 accounted for $800 million of Turkey's total agricultural export sales.

Agricultural development, particularly for export, is one of the stated goals of the present Turkish government. Important areas of interest include increasing productivity, diversifying into new crops and improved varieties and improvement of food processing and marketing systems.

Although new dams and irrigation projects now on the planning board will bring more than a million additional acres under cultivation, Turkey has limited potential for development of new farmland. Production increases will have to come largely from improved farming practices, use of better seed, etc. The government is encouraging cropping of the roughly eight million acres that are fallowed each year, in those instances where the rainfall is adequate.

Soybeans are being promoted as a second crop following wheat in the Cucurova and Aegean regions, as is corn, groundnuts and sesame to a lesser extent. Several World Bank loans have helped upgrade the dairy and beef herd to some extent, but there is a need for further genetic improvements.

Fertilizers, agricultural chemicals, equipment and other production inputs are readily available. Prices for these inputs are, however, rising faster than agricultural commodity prices, particularly since the government has stopped subsidizing fuel, fertilizers and chemicals to the farmer. There appears to have been a decrease in use of these products, particularly fertilizer, by farmers as a result of the higher prices.

There is general agreement among farmers that the present government is moving in the right direction. There are, however, still

a number of structural problems which act as a brake on more rapid rationalization of the agricultural sector. Chief among these are probably the continued government intervention in agricultural commodity pricing,its application in certain cases of various export strictures and the involvement of State Economic Enterprises in various fields of activity.

The State Economic Enterprises (SEEs) are parastatal companies that originally represented Kemal Attaturk's solution to the lack of a Turkish commercial class under the Ottoman Empire. The SEE's have traditionally marketed the principal agricultural products of Turkey at officially determined prices that were often fixed below cost, with the government absorbing the losses. They are now allowed in most cases to charge prices that reflect their actual costs, but there are still numerous inefficiencies inherant in the system.

Energy, transportation and communications bottlenecks also represent constraints to Turkish agricultural progress. The current tight money policy and the foreign exchange risk involved in borrowing abroad because of the continuing currency devaluation also may make it difficult in certain cases to accumulate adequate funds for investment.

Despite these problems, Turkish agriculture, because of its proximity to major export markets and the favorable land, labor and climatic factors, has the potential to greatly expand its production and exports of farm products.

4.3. Investment Conditions

If someone were to ask 100 U.S. businessmen which OECD country has the highest growth rate and one of the lowest budget deficits in relation to GNP, and also has one of the most liberal foreign investment laws in the world, it would be surprising if more than one or two cited Turkey. One of the greatest stumbling blocks to the inducement of greater U.S. investment in Turkey is the continued misperception of a sick economy and an atmosphere of general hostility toward foreign investors.

Turkey in fact has had an extremely liberal foreign investment law on the books since 1954. The application of the law was extremely erratic, however, due to the inward looking orientation of the country, policies that afforded limited scope for unhindered application of market forces and a general unease felt toward the private sector by the bureaucracy, particularly in respect to foreign investment.

The Economic Stabilization Program adopted in January, 1980, did not just represent a reaction to the economic disruptions of the mid-1970's. The Program signaled a basic shift in Turkey's economic development strategy.

The twin thrusts of the new economic strategy consist of a turn from an inward looking economy based on import substitution and government intervention in the marketplace, to an outwarded orientation combined with much greater reliance on market forces and on the private sector as the primary engine of growth. The misallocation of resources caused by undue price intervention was one of the problems specifically recognized by economic technocrats responsible for drafting and applying the new program.

The new directions have not been put completely into practice as yet, particularly in agriculture. It takes time to turnaround a government bureaucracy that has been oriented for many years toward a particular philosophy and practices. The concensus among Turkish businessmen and farmers, however, is that the government is making significant progress in the right directions.

Part of Turkey's new economic direction is a determination to attract much more extensive participation by foreign investors, particularly in export oriented industries. To this end, sectors formerly closed to foreign investment, such as food processing, have been opened up. The foreign investment approval process has been greatly simplified and the application of the already liberal 1954 law now matches its spirit.

One of the most helpful moves has been the consolidation of all foreign investment decision making responsibility into one office, the Directorate of Foreign Investment of the State Planning Organization. The general spirit toward potential foreign investors at the DFI is "let's see how we can help you do what you want to do" instead of the sometimes more common "let's figure out why you shouldn't be allowed to do that".

The DFI can approve foreign investments of less than $50 million and with foreign participation of 10 to 49 percent. Above these limits, DFI reviews and evaluates each proposal then sends it on to the Council of Ministers for final approval. Dr. Namik Kemal Kilic, advisor to the DFI, points out that during the past year, some 25 applications for approvals outside the bounds of the above limitations have been processed by DFI and sent on to the Council of Ministers. Not one was disapproved.

How do the new procedures work in practice? The general manager of one of the few wholly foreign owned ventures in the country, the subsidiary of an American firm, says that there has been a complete and unprecedented turnaround in the entire attitude of the government officials responsible for investment approvals. He recently submitted an application for revised treatment of his business operations and was pleasantly surprised when the DFI actually added several measures which liberalized his original request even further. This particular American manager says that his greatest problem is convincing his home office that the Turkish investment climate has changed this much.

Under the provisions of the current investment law, approved foreign investments in Turkey receive the same treatment in all respects as local investments. The law guarantees transfer of profits, fees and royalties as well as repatriation of capital if the business is sold or liquidated.

There are no legal limits on employment of expatriate technicians or managers, nor on royalties, licensing arrangements or fees for technology transfer. DFI is responsible for approving these arrangements, however, and generally follows the OECD guidelines, which specify license fees ranging from one to six percent of gross sales. The average license fee in Turkey is about three percent.

Investment approval requires the preparation of an acceptable feasibility study and business plan. An initial deposit of 25 percent of total required capital is made with the Central Bank at the time the approval is requested. The FDI then issues a letter approval to the company. Necessary building permits and other normal business startup requirements must be obtained through other government departments, of course.

A wide range of investment incentives is offered in Turkey. These include investment allowances under which 60 percent of total investment is tax deductible; exemption from customs duties and import taxes on required imports of machinery, equipment, spare parts, raw materials, etc., for use in export operations or in preferential industries or geographic regions; subsidized long term credits for qualifying investments and short term credits for exports.

Other incentives include retention by exporters of 50 percent of foreign exchange earnings to finance essential imports; tax deductions based on export revenues and on volume and type of goods exported. There is a requirement in certain investments that 30 percent of the total output be exported. This is reportedly not being rigidly enforced, however.

Another interesting possibility is offered by the existence of blocked currency funds in Turkey. A foreign investor willing to utilize these blocked funds can obtain them at a significantly preferential exchange rate.

Perhaps one of the most important aspects of the Turkish investment situation is the existence of numerous business groups with the financial and managerial capability required to make them good joint venture partners. Most of these groups, even those that are primarily involved in industrial activities, are eager to become engaged in agroindustries. They also recognize that the United States is the foremost source of the necessary

technology and managerial systems in the agroindustries field.

One of the more important financial support systems for investments in the agricultural sector is the T.C. Ziraat Bankasi, the Turkish Agricultural Bank. This is a wholly government owned agricultural development bank established to finance agriculture and promote collection of farmer trust deposits.

Some 80 percent of the Bank's funds are lent to agriculture and agribusiness, with the remainder financing international trade in industrial products. The Bank acts as the recipient and disbursing agency for World Bank loans aimed at Turkish agriculture.

The Bank provides medium and long term financing as well as short term production credit. They are particularly interested in integrated agricultural production and processing projects, especially those aimed at exports. The Bank also employs 500 agricultural technicians to evaluate loans and provide technical services to farmers.

The Bank does not lend to large commercial ventures. It can, however, support such ventures when they are set up as nucleus estates or with contract grower schemes, by financing the small farmers who act as suppliers to the central venture. In the case of an integrated poultry operation including outgrowers, for example, the Bank can provide financing to the outgrowers for their initial investment requirements such as the building of broiler houses. Loans are also offered for purchase of breeding stock, semen, equipment, etc.

Money is lent to farmers at a subsidized rate of 20 percent for short-term production loans or 22 percent for loans with a payback period exceeding one year. Due to the requirement that 30 percent of the loan be left on deposit with the bank, however, the effective interest rate is nearer 29 percent.

The Bank will also in certain cases take an equity position in a venture, for example, a cooperative processing plant. Bank administration have indicated that they would be interested in entering into co-financing schemes with Arab financial interests, although they have not done this as yet.

Due to Turkey's favorable investment climate and its strategic geopolitical importance, The United States government is offering considerable support for increased U.S. investment there. This support includes availability of the full range of programs offered by the Overseas Private Investment Corporation, including political risk insurance, loans and loan guarantees and payment for feasibility and reconnaissance studies. The question of convertability insurance has not yet been decided by OPIC, however,

partially due to Turkey's current policy of progressive devaluation of the Turkish Lira.

The U.S. Trade and Development Program, which sponsored the investment and trade mission whose results are reported herein, is also interested in partially funding feasibility studies in Turkey. International Finance Corporation, an agency of the World Bank, has specified Turkey as one of its foremost priority countries and will lend to commercial ventures there as well as taking equity in such ventures. The U.S. private banking sector is also taking a renewed interest in Turkey.

The existence of political stability and a growing economy, substantial market outlets in the Middle East and Europe and the general receptiveness to American investment on the part of the government and Turkish private sector as well as the extent to which Turkey possesses the natural resources required for increased agricultural production should make the country one of the favored targets for American firms seeking to broaden their international business base. Unless such American firms move fairly quickly, however, their place will be pre-empted by European companies that are closer to the scene and more cognizant of Turkish opportunities.

5.0. INVESTMENT AND TRADE OPPORTUNITIES BY SECTOR

While Turkey's 46 million population and prospects for renewed growth in per capita incomes promise a sizeable domestic market, one of the major attractions for investors in the agricultural sector are the prospects for growth in exports to North Africa and the Middle East.

Turkey is an Islamic country whose involvement in the Middle East dates back to the period of the Ottoman Empire which ruled a significant portion of the area at one time. Convenient access to the markets of the region is provided by overland and water routes from Turkey.

Turkey's agricultural exports to North Africa and the Middle East doubled between 1980 and 1981, and have probably registered at least as dramatic growth in 1982. Food exports to Iraq alone increased fourfold in 1981 over 1980. Large increases were also registered in sales to Egypt, Syria, Kuwait, Jordan, Saudi Arabia and Iran.

Turkey's Middle East markets are obviously limited by population size. The capital surplus oil exporting countries including Iraq, Libya, Saudi Arabia and Kuwait had a population of only 30 million in 1980. These countries are, however, characterized by the highest levels of per capita income in the world and lack agricultural production capacity. In addition, Turkey's present market share in the region is still quite small--only about eight

percent in the case of horticultural products, 14 percent for sheep and mutton and two percent in beef and cattle, for example. There appears, therefore, to be substantial opportunities for expansion of Turkish food exports to the region.

In order to exploit these opportunities, Turkey must continue to increase the level of agricultural productivity. This presents an obvious potential for a profitable match between American production and prccessing technology and Turkish agriculture.

There are a number of other constraints that must also be addressed if Turkish exports are to continue to increase at the present rate. These include the freight bottleneck, occasioned by inadequacy of transport facilities and laws which unduly restrict trucking operations between Turkey and neighboring countries. Another constraint is the generally poor quality and high price of packaging materials.

5.1. Livestock and Products

The present relatively low per capita consumption of meat and livestock products in Turkey as well as the proximity to Middle East markets combined with the fact that slaughter techniques used by Turkey as a Moslem country are acceptable to other Moslem countries in the region make the livestock sector one of the more interesting.

Livestock development occupies a priority position in Turkish government planning. The government is particularly encouraging gains in productivity through improved improved genetics and better feeding, housing and management. Export subsidies are paid for meat, dairy and poultry products.

Most livestock are raised by small farmers in limited numbers. There is very little use of prepared feeds. Feeding of cattle and to a lesser extent lambs is just beginning.

Livestock products exports are becoming increasingly important in Turkey's agricultural trade, however. Total exports of livestock, dairy and poultry products grew from $87 million in 1978, to $128 million in 1980 and $345 million in 1981. Exports in 1982 are forecast to increase to $600 to $700 million.

The livestock and meat industry is attracting considerable interest from Turkish business groups. Major investments are being considered in beef cattle feedlots and in slaughter houses and meat processing plants, particularly for export.

A new decree published in the Official Gazette of June 12, 1982, authorizes the private sector for the first time to build and operate slaughter houses and meat processing facilities. Prior to this, all slaughter was controlled by municipal governments

and the state owned meat and fish organization, which operates 20 large slaughter houses and controls about 10 percent of the total national meat marketings. The government's former role as sole exporter of meat has been ended and the former minimum price on beef exports abolished.

The chief constraints to more rapid growth of the livestock industry are generally low productivity per animal, the lack of an adequate national feed base, low level of technology and management skills and lack of an adequate program for health and disease control. Given the present production levels it would probably be difficult to continue to meet domestic demand for meat, let alone fully take advantage of export marketing opportunities.

5.1.1. Dairy

The number of cows milked increased from 5,538,000 in 1978 to an estimated 6,200,000 in 1982. Milk production during this period increased from 3,209,000 metric tons to 3,600,000 metric tons. The dairy industry continues to be one of the more profitable areas for farmer investment.

The Turkish government continues to press for improvements in productivity per animal. Some 2,700 dairy breeding animals were imported during 1981, as well as 15,000 doses of semen.

Most milk is utilized for production of cheese, yogurt and butter. Consumption of other dairy products is limited, including fluid milk.Although separate records are not kept, there is a substantial export of dairy products, particularly butter and ghee, to the Middle East and North Africa. Cheese exports, which are recorded, amounted to 610 tons during the first four months of 1982, compared with only 139 tons during the same period in 1981.

A State Economic Enterprise, the Turkish Dairy Products Board, is the biggest factor in milk processing, with 36 plants in total. There are also three private milk companies. One of these, the largest, is located in Izmir. The processing company does not own any cows of its own, but collects milk from many producers, most of them small.

An export subsidy is paid to exporters of cheese, milk and butter. This amounts to 20 percent on the first $4 million in sales; and 25 percent on sales of $4 million to $15 million. Domestic dairy product prices are high enough to make milk processing a profitable enterprise. One of the private dairy companies reportedly purchases milk from farmers at TL25 to TL28 per liter and sells it at TL138.

Given government policy aimed at greater reliance on private sector ventures, there appears to be opportunities for several

additional large, well managed integrated dairy processing ventures in the vicinity of the larger population centers.

5.1.2. Beef Cattle and Sheep

The current Turkish cattle population is approximately 17 million. Most of these appear to be dual purpose native cattle, although a fair number of dairy animals are being imported. The rapid growth of North African and Middle Eastern market demand for Turkish meat and live animals is generating interest among several industrial groups in feeding of beef and to some extent, lambs.

During 1981 exports of cattle amounted to 26,000 head while 1,800 tons of beef were shipped. The first four months of 1982 saw cattle exports rise to 52,500 while beef export sales were 5,245 tons. During the first four months of 1981, by contrast, official records show no exports in either category.

Helped somewhat by export outlets and improvements in the Turkish domestic economy, red meat prices have doubled since 1980. This has depressed demand to some extent and led to increases in demand for poultry meat. The retail price of beef in the local market ranges from TL300 to TL600 depending on quality and cut. Per capita consumption of beef in 1981 was 4.5 kg.

Exports of sheep and goats during 1981 amounted to 1.8 million plus 20,000 tons of mutton. The figures for the first four months of 1982 are even more significant--with 160,000 sheep and 127,000 goats exported during this period, compared with 19,962 sheep and 56,000 goats exported during the same period in 1981. Mutton exports for the first four months of 1982 were 10,425 tons compared with 2,908 tons during the comparable period in 1981.

Major markets for live sheep, goats and cattle are Iraq, Iran, Syria and Saudi Arabia. Iraq, Iran and Saudi Arabia are becoming important export markets for Turkish beef. The boom in meat and live animal exports to the Middle East really started in 1980, because of the realignment in the value of the Turkish Lira which helped make these products competitive.

An export subsidy is also paid to exporters of red meat with the exception of veal and lamb. The subsidy is 15 percent on sales up to $4 million, 20 percent for sales of $4 to $15 million and 25 percent on sales of more than $15 million.

In order to continue the current rate of increase in exports, current bottlenecks in the transportation system must be alleviated. This is particularly true in the case of meat, since adequate refrigerated transport is lacking.

Successful growth of a beef and/or lamb feeding industry will depend to a large extent on the capability of instituting modern nutritional, management and health care techniques. U.S. involvement in the feed manufacturing and feeding sector would be particularly helpful in the present Turkish livestock situation.

There is already some interest in this sector on the part of American companies. A major U.S. potato processor is reportedly entering into a joint venture for potato production and processing integrated with cattle feeding. There should be other similar opportunities based on the availability of food processing byproducts.

5.2. Poultry

The Turkish poultry industry has reached the takeoff point. As commercial egg and broiler production has expanded during the past several years, the proportion of farm family flocks has been reduced to less than 30 percent of total production.

There are still several critical structural problems inhibiting the advance of the industry to a level competitive with world standards. According to an International Finance Corporation (World Bank) study of the Turkish poultry industry conducted in late 1981,

> Turkey is well endowed with the characteristics and resources required for the development of a large-scale modern poultry industry that could supply both the domestic market and a portion of the demand for imported poultry products from neighboring Middle East countries. However, due to small-scale production units, the fragmented structure of the industry and the poor quality of feed, the supply of poultry products is inadequate for a country of Turkey's population and income level, and the price of poultry meat is high by international standards. As a result, annual per capita consumption levels for poultry meat and eggs are relatively low for a country of Turkey's stage of development, approximately 3.46 kg. and 5.18 kg. respectively.

The Turkish poultry industry is not yet fully integrated to any appreciable extent. It will be necessary to achieve full integration before the industry can realize its complete potential. Another very serious roadblock to poultry production efficiency is the almost complete lack of soybean meal in poultry rations. Another problem involves inadequate supplies of corn for rations.

If the feed ingredient and feed formulation problems can be solved, the base presently exists for development of an efficienct poultry production system that is fully integrated from hatcheries and parent stock to processing and marketing. Several large industrial

groups are already going ahead with plans to diversify into poultry, particularly broilers. There are a large number of small farmers presently producing poultry, that are available to serve as the nucleus of contract outgrowers.

As production efficiency, particularly the feed conversion rate, improves it should be possible to bring prices down further in relation to red meat and greatly accelerate the rate of increase in demand for broilers.

It is estimated that Turkey produced 156,000 metric tons of chicken meat and 4.24 billion eggs in 1980. Demand is estimated by the World Bank to increase to approximately 213,000 mt in 1985 and 313,000 mt by 1990. Demand for table eggs is estimated to increase to 4.85 billion in 1985 and 5.65 billion in 1990.

If the efficiency of the Turkish poultry industry is increased to the point where it is able to break into the important Middle East markets, rate of growth should be even larger. Imports of poultry meat by Iraq, Syria, Iran, Lebanon, Saudi Arabia and Jordan in 1980 were estimated to total around 360,000 tons.

The price ratio between red meat and chicken meat in Turkey is presently a little less than two to one. This is much less than in other countries at comparable levels of development, where the ratio tends to be three to one or greater. As this ratio continues to improve in favor of poultry meat, consumption should also continue to rise.

The fragmentation of the industry at present can be illustrated with some figures. There is only one grandparent stock farm in the country, and some 12 parent stock farms. There is only one producer of table eggs with capacity of 50 million a year.

There is no single broiler producer with a production capacity of more than 1.5 million birds per year, compared with the rule of thumb that operations must produce at least five million broilers a year to be ecomically viable. Unlike the typical integrated production unit in the United States that comprises all of the basic production and marketing steps, at least nine separate stages in Turkish broiler production, each operating as a separate profit center, can be identified.

Another potential production constraint which will assume even greater importance as large scale integrated poultry operations develop is the lack of an adequate spectrum of poultry vaccines. Present regulations limit the manufacture of vaccines to the government and restrict imports of vaccines unless a formal and time consuming process of proving need is carried out.

Only a limited number of vaccines are produced at present, for the poultry diseases that are most commonly encountered in Turkey. If an outbreak of a different disease occurred, by the time vaccines could be procured from outside it might well be too late to save the flock.

Corn and soybeans can now be imported into Turkey duty free and with no quota imposed. Imports do however require a license. One area of interest among American companies involved in grain and/or soybean exports could be participation in an integrated poultry operation as one means of helping capture additional markets.

Given the production and market base that already exist and the need for a radical transformation of the Turkish poultry sector to increase its efficiency and productivity, there would appear to be a natural fit between American technical knowhow and Turkish investors in the poultry sector.

5.3. Feed Manufacturing

Total feed manufacturing capacity in Turkey is estimated to be 2.5 to 3.0 million mt. Total output in 1981 was approximately 1.5 million tons. Less than half this is for poultry feed.

A state owned feed enterprise company accounts for 19 wholly owned feed plants and an additional 13 held in partnership with private companies. The state owned plants account for about 15 percent of total milling capacity.

The Turkish private feed manufacturing sector has about 90 plants. Eight additional government plants, three joint venture government/private plants and some 50 private sector plants are reportedly under construction and will add a total of more than 1.2 million mt to present capacity.

Thus there is apparently much greater feed manufacturing capacity presently in existence and coming on stream in the near future than is required by the existing livestock and poultry industry. There appears to be no difficulty experienced by producers in obtaining ample supplies of feed. There is general concensus, however, that the quality of the feed is not up to standard.

Industry shortcomings include an almost complete lack of analysis of ingredients and final feed product for quality control purpose; little or no use of least cost formulation; and failure to precisely control ingredient amounts. The government occasionally samples feed to determine whether it matches government regulated feed standards but this service is not particularly meaningful since it is performed on such an irregular basis.

Mission members visited one feedmill near Ankara. While they

found this mill to be generally well managed, they did note several areas that needed to be improved. Among these were lack of analysis of incoming ingredients for nutrient content and of finished feed to ensure it met quality specifications. Minor feed additives such as salt, calcium and vitamins were not being adequately measured into the feed.

Sunflower oil, despite its high cost and difficulty of handling as compared with animal fats was being used as a fat energy source. Feed formulations are changed only when a major ingredient becomes unavailable. The mill owner did, however, realize the existence of these problems and is interested in obtaining technical help in correcting them.

Other areas needing change include the almost exclusive use of bagged rather than bulk handling; and the lack of pelleting facilities. According to livestock producers, the government owned feedmills are reportedly less efficient and do a poorer job than the privately owned mills.

The government at the present time is not in favor of new investment in feed manufacturing facilities, due to present overcapacity. There will be a need, however, to add new mills or acquire existing mills and improve their efficiency, on the part of business groups entering into integrated livestock and poultry operations.

The present over-capacity in the feedmilling industry will be taken care of during the next several years as the Turkish poultry and livestock industry expand. There is also some substantial opportunities for exporting prepared feed to Syria, Iran, Iraq and possibly other countries in the Middle East.

One of the pressing needs of the feed manufacturing industry is to be able to obtain a larger supply of better quality feed ingredients, particularly soybean meal and corn. The Turkish government is attempting to promote domestic soybean production and to increase present corn production which in 1982/83 is estimated to total 1.3 million tons, of which 800,000 will be used for livestock feed. In the meantime, however, imports of soybeans and/or soybean meal as well as corn will probably have to be increased in order to realize significant progress in development of the poultry and livestock industries.

5.4. Soybean Crushing

The most important seed oil sources in Turkey are sunflowers and cotton. Estimates of actual production of edible oils in 1981/82 by the Foreign Agricultural Service, USDA, are 419,000 tons, including olive oil. This total includes about 107,000 tons of cottonseed oil and 223,000 tons of sunflower seed oil.

The output of sunflower seed oil has been trending downward, reportedly due to degeneration of the seed. Crushers report that the oil extraction rate, which averaged about 43 percent in 1980/81 declined to 41 percent in 1981/82 and is expected to be down to 40 percent in 1982/83. The degeneration of the seed is resulting from farmers' tendency to save their own seeds instead of purchasing certified seed from the government.

Some 140,440 tons of seed oils were imported during November 1, 1980 to October 31, 1981. Soybean oil imports increased from 100,877 tons in 1979/80 to 115, [illegible] tons in 1980/81. Most of the soybean oil imports come from Spain.

The government follows a free market policy with no direct intervention in domestic prices for edible oils. The cost of imported soybean oil is less than that of locally produced oils. All of the soy oil is being imported by margarine manufacturers.

The Turkish government has begun to promote soybean production as a second crop, primarily following wheat. The Cucurova region, centering on the city of Adana, and the Aegean area around Izmir appear to offer the best prospects for production of soybeans. Some 4,000 tons of soybean seed were imported in 1980/81. Producers complained of low germination and some virus infestations in the U.S. source seed, however.

There are mixed reports about the progress of the program, which has a goal of producing soybeans on 100,000 ha. in Cucurova by 1985. Results of the first two year's plantings have not met expectations. One problem is a white fly which preys on the plants..

Some of the local authorities claim, however, that the farmers in the region have learned how to grow soybeans now, and that the program should take off next year. There is general agreement that farmers recognize the benefits of having the nitrogen-fixing soybean plant as part of their crop rotation.

The Turkish government has set a support price of TL52 per kg. for soybeans, to encourage production, with an additional TL 17,500 per hectare planted. There are reportedly long delays in receiving government payments for soybeans as well as for other crops, according to growers.

Another basic problem consists of government pricing and marketing policies for oil and meal. These policies have resulted in a negative margin for soybean crushers. As a result the government has become the sole buyer from the farmers and pays the crushers a fee to crush on a custom basis. The crushers are also prevented by regulation from exporting meal at a higher than domestic price.

Continued application of these poliicies by the government will in time likely discourage both soybean producers and crushers. Even at best, however, there is no possibility that Turkish domestic soybean production can expand rapidly enough to meet the needs of the Turkish poultry industry over the next five to ten years.

The logical solution, given the large imports of soybean oil and the pressing need for soybean meal to increase the efficiency of the poultry industry, would be to greatly expand soybean imports while at the same time continuing to promote growth in local production.

If this happens, there will also need to be improvements in crushing efficiency. Most of the crushing plants have been set up to handle cottonseed or sunflower seed. Soybean meal from these plants normally has a higher oil content and lower protein content than would be allowable in the United States.

Most port, grain handling and grain storage facilities in Turkey are administered by the Soil Products Office of the Ministry of Commerce (TMO). The TMO has a 100,000 ton elevator with bulk loading facilities at the Port of Mersin, near Adana, for example. The main purpose of this facility is to handle wheat exports. It could, however, be utilized for soybean or grain imports, except that TMO normally does not approve private use of its port facilities on a regular basis, leading to difficulties in scheduling shipments.

Soybeans can be imported duty free into Turkey. Import of soybean meal is banned, however. The greatest constraints for importers of all commodities, however, consist of interest rates of five percent per month for import credits, and the continual devaluation of the lira which can impose a price differential of as much as three percent per month between purchase and delivery. The former problem could be reduced through use of U.S. credits for commodity purchase.

If it appears that the Turkish government will in the future freely allow imports of soybeans, there appears to be scope for a U.S. soybean processor to enter into a joint venture probably in the Adana area and set up a modern hexane solvent soybean processing plant, or to renovate an existing facility to upgrade its efficiency. Another alternative would be to build the plant in the Izmir area which presently has the highest concentration of poultry operations in Turkey.

5.5. Seeds

The seed industry represents one of the greatest untapped potentials for U.S. companies with the requisite capabilities, given the very important caveat that unless the Turkish government liberalizes the present seed regime in order to afford

more opportunities for the private sector, the potentials cannot be realized. There are indications that the government is moving in this direction.

Almost all aspects of the seed industry in Turkey have historically been controlled by the government. The report of an Industry Council for Development sponsored seed mission to Turkey in early 1982 points out that Turkey has adhered to the European model of a national seed system which embodies state control and regulation of virtually all seed activities including imports, local production, certification and marketing. The Turkish system has not been able, however, to keep up with the demands of a more dynamic agricultural sector and presently represents more of a hindrance than an aid to increased agricultural productivity.

Among the major problems that inhibit the seed industry are government purchasing practices for both internal supplies and imports, which have resulted in a lack of availability of new improved genetic materials and the provision of generally mediocre seeds to Turkish farms as well as making it difficult for private foreign seed companies to supply better quality seeds to Turkey.

The length and severity of Turkish seed testing and certification procedures also pose a significant barrier to introduction of new and improved varieties. A new seed regulation which was not available to the mission in English supposedly rectifies some of these problems, but it was the feeling of the TDP mission seed specialist that the new regulations continued to embody some deepseated difficulties which will still pose problems for foreign seed companies wishing to enter into joint ventures with Turkish seed firms.

If these problems can be ironed out, however, the opportunities for involvement by American seed companies in Turkish ventures will be numerous. The changeover from a government controlled to a government regulated private seed sector will certainly require development of a totally new seed industry for Turkey and will present some impressive and profitable market opportunities.

5.6. Fruits, Vegetables and Nuts

Turkey due to the wide range of its agroclimatic zones grows a large variety of fruits and vegetables. The traditional export market for Turkish fresh fruits and vegetables as well as other commodities has been Western Europe, primarily due to proximity and the existence of well defined markets there.

Both Turkey's share of the EEC market and the proportion of total

Turkish exports going to the EEC have steadily diminished during the 1970's, with Turkish share of the market shrinking at the rate of four percent per year during the decade. The major fresh fruit exports from Turkey to the EEC have been citrus, apples, melons, grapes, stone fruits and berries. Processed items include tomato paste, fruit pastes, fruit juices and raisins. Exports of nuts, particularly filberts and pistachios are also important.

The recent entry of Greece into the EEC and the pending entry of Spain and Portugal could pose more problems for entry of Turkish products, since Turkey exhibits much the same agro-climatic characteristics as these three countries. Future tariff reductions and changes in quotas could mitigate the results of EEC expansion to some extent, however.

The major constraint to increasing exports to the European countries, however, is the fact that this has become basically a static market, with very little population growth and a drastic slowdown in income gains. Brightest growth prospects for Turkish exports therefore lie in the North African and Middle East region. Eastern Europe has also become an increasingly important market for citrus and some other horticultural products.

Between 1978 and 1981, exports of Turkish apples went from $6 million to $60 million; citrus, from $44 to $110 million; fresh vegetables were up from $11 million to $31 million; and preserved vegetables went from $6 million to $26 million. Most of this growth in exports with the exception of citrus has been to the Middle East.

Total fresh fruit exports in 1981 amounted to 130,000 tons of apples, 110,000 tons of lemons, 55,000 tons of tangerines, 45,000 tons of oranges, 11,000 tons of grapefruit, 10,000 tons of grapes, 5,600 tons of peaches, 3.500 tons of plums and 2,250 tons of pears. Most of this went to neighboring Arab countries with the exception of lemons which were sold mainly to Eastern Bloc countries.

In the processed foods area, tomato paste, fruit juices and fruit pastes have been the main exports from Turkey, with the exception of the very important raisin and dried fruit category. Tomato paste exports have been particularly hard hit by the increasingly difficult access to the EEC. Tariffs on non-tropical processed fruits and vegetables into the EEC have been high at 15 to 30 percent.

The Middle East has to some extent taken up the slack in Turkish tomato paste exports. In 1973, Turkey exported 16,000 tons of tomato paste to the EEC and only 600 tons to the Middle East.

In 1977 Turkey shipped 18,000 tons to Europe and 6,000 tons to the Middle East. By 1980, however, Turkey's tomato paste exports to the EEC were only 2,500 tons while the Middle East accounted for 75 percent of Turkish tomato paste export volume.

A new agreement signed with the EEC in June, 1980, allows Turkey an import quota of 16,500 tons of tomato paste per year, with provisions for gradually reducing the tariff to zero by 1987. This should make Turkish paste sales more competitive and with the growing market in the Middle East affords the Turkish tomato paste industry opportunities for further growth.

There is a great deal of interest at the present time in Turkey in expansion of the processed fruits and vegetables industry. Several firms are planning major frozen food enterprises to take advantage of the growing domestic market as well as for export to the Middle East and elsewhere. As labor and other costs continue to rise in the food processing industries of other industrialized countries in North America and Western Europe, Turkey could be an alternative site for location of some of their food processing industries.

This is particularly appealing in terms of utilizing Turkey as a base for greater penetration of the Middle Eastern markets. American firms seeking to compete in the Middle East with processed foods could well find that Turkey has a comparative advantage in this area. One dairy processing firm, for example, recently signed a licensing agreement under which they will market products throughout the Middle East under the brand name of a major American food company.

Some of the constraints which must be cleared up in order for Turkey to realize its full potential in food processing for the domestic market and particularly to compete adequately in export markets include generally poor quality and high price of packaging materials; inadequacy of transport and transport facilities; and lack of sophisticated technology in the food processing industry, particularly in the area of quality control.

The American food processing sector can play a significant role in correcting these problems, particularly in the area of technology and in the total marketing process. Packaging is another area that offers interesting opportunities for U.S. packing materials manufacturers.

An important consideration that will affect Turkey's success in gearing up to supply fresh and processed fruits and vegetables to the Middle East markets is the fact that several other Mediterranean countries are planning along the same lines. In addition to the Southern European countries, Tunisia, Morocco and Egypt are also seeking to improve and expand their own fruit and vegetable sector in order to penetrate the Middle East.

As noted above, Turkey appears to have some comparative advantages

in this respect. Unless Turkish agroindustry can exploit these comparative advantages effectively, however, by improving productivity and efficiency and removing current industry constraints, it will be difficult to compete with other Mediterranean suppliers. This is another urgent reason for attracting U.S. investment, technology and management into the Turkish fruit and vegetable sector.

5.7. Equipment Sales and Related Opportunities

Turkey is classified by the OECD as an industrialized country, although economic development has lagged behind some other OECD countries. Much of Turkey's agricultural and agroindustrial equipment needs can be supplied by its own manufacturers. There are opportunities, however, for sales to Turkey of more sophisticated machinery and equipment, particularly in the food processing area. This of course includes cereal milling, oil seed crushing and refining, canning and freezing of fruits and vegetable and other specialized operations.

The market for food processing and packaging equipment, for example, was surveyed by the American Consulate at Istanbul in early 1982. Demand for foreign made food processing and packaging equipment was estimated to total $20 million in 1982 and forecast to double in the next few years.

Major sales opportunities are for small to medium capacity, semi-automatic food processing and packaging equipment, although growth of markets for processed food in the Middle East could help increase the Turkish market for more large capacity, fully automatic machinery. In order to meet quality requirements for export, Turkish food industries will have to improve the quality of their products as well as its packaging. This should lead to demand for better equipment.

Biggest competitor in sales of food processing and packaging equipment to Turkey is West Germany, which holds an estimated 40 percent of the present market. The U.S. share in the food processing and packaging machinery market in Turkey is well below 10 percent. According to the Consulate survey, the greatest opportunities for U.S. firms lie in the areas of packaging machinery and in vegetable and fresh fruit processing equipment; meat and sea food processing equipment; cereals, beans, dried fruit and nut processing equipment (sizing, sorting, detecting, cleaning).

In the farm machinery area, Turkish agriculture has a reputation for being over-capitalized. Knowledgeable observers point out, however, that starting in 1985 there will need to be a massive replacement cycle for overage tractors and implements. If the present ban on tractors with more than 65 horsepower is lifted,

which seems likely in view of the need to increase general field crop productivity, this will open up a new market for larger tractors and equipment.

The ambitious irrigation development schemes being planned for the next 10 years should also open the door to sales of all types of irrigation equipment as well as engineering and technical services. The transport field will require major expansion also if Turkey is to realize its future agricultural export potential.

Another priority area is construction of glass and plastic greenhouses, to increase early vegetable supplies and exports. While the feed manufacturing industry is operating at much below capacity, the move to integrated livestock and poultry operations including operation of feedmills will open up sales opportunities for more sophisticated feed milling and related equipment. There are also plans for significant increases in grain storage facilities.

The establishment of grain receiving, handling and transshipment facilities at one of the Turkish ports, probably Mersin or Izmir, might also be an interesting possibility for serving lower capacity ports in the Mediterranean and possibly even West African region. The Directorate of Foreign Investment has expressed interest in granting duty free zone concessions to such an operation if it were established in connection with the port at Mersin, which has a present draft of 35 feet.

Turkey as a result of its new economic and political directions combined with abundant natural resources, large domestic market and access to export markets with high growth potential, offers significant opportunities to American agroindustrial manufacturers during the next decade. Exploiting these opportunities effectively will require the American firms to establish a presence of some sort in Turkey and may necessitate a flexible approach to some combination of direct sales, licensing and joint ventures.

The sectoral opportunities for investment and trade noted above are examples. They do not exhaust the complete range of business opportunities for American agroindustries firms in Turkey. The alert American CEO will doubtless spot other potentials for profitable involvement as he continues to review the Turkish situation.

ANNEX I.

Pre-Investment Profiles

Ref: Turkey 821

INTEGRATED BROILER PRODUCTION

Project Description

The project will be an integrated broiler production unit with capacity for output of 5,000,000 per annum. The site is about 60 miles from Istanbul.

The project sponsors are the Papila Fish Production and Processing Trade Company. The principal people involved in the project will be Mr. Hasan Papila, President of the Board; Mr. Yavuz Papila, board member; Mr. Mithat Papila, member of the board and manager of the company feedmill; Mr. Mehmet Aktay, General Director and Mr. Omer Murat, electrical engineer. Mr. Aktay has a Master of Science Degree in Poultry Production from the American University in Beirut.

The Papila Company is presently involved in fish production and processing and in manufacture of fishmeal and animal feeds. The company has a paid-in capital of $230,000 and own and operate a factory vessel for producing fishmeal, a purse-seiner/trawler and a feedmill with capacity of 10 tons per hour.

Company headquarters are in Istanbul while the fishing and feedmilling activities as well as the anticipated site of the poultry project lies along Turkey's Black Sea Coast. The poultry project is seen by the company as a natural extension of its present lines of business. A second feedmill is also planned at a later date.

The Papila Company has made some extensive surveys of the market and production possibilities for Turkish broiler production and have studied the project in some depth. They are presently planning a comprehensive feasibility study but would welcome some sort of U.S. participation in this study.

Financial Requirements

Total capital investment requirements are estimated to be U.S. $11,000,000. The Company would like to furnish $8,500,000 of this total in the form of equity and loans from the Turkish Agricultural Bank. They are considering external loans in the approximate amount of $2,500,000 to provide the necessary foreign exchange for purchases of American broiler breeders,

equipment and production technology.

Technical Details

The project will include provisions for grandparent and parent stock; hatchery; commercial rearing for broilers (and later for table eggs); slaughter house; processing of slaughterhouse byproducts; egg grading and packing house; cold storage; refrigerated transportation; and feed mill. Papila Company has conducted an informal survey of European and North American poultry operations and determined that the U.S. breeding stock, much of the equipment and certainly the U.S. technology is the most desirable. Therefore they intend to procure as much as possible from the U.S.

Marketing Plan

Goal of the project is to market the majority of the products in Middle East and African markets. There also appears to be excellent opportunities to market additional poultry products in Turkey, however, so long as the products are produced efficiently. (Note body of report for more details on poultry meat market prospects).

Project Inputs

Since Papila is a fishmeal producer, they already control one of the feed ingredients. Corn is available in Turkey as well as other potential feedgrains such as wheat and barley. The question of soybean meal availability must be resolved before this or any other Turkish largescale poultry operation gets underway.

Local labor is hard working, low paid in relation to the rest of the region, and readily available. Despite the beginnings of the Turkish economic turnaround, unemployment remains at very high levels.

Management will be provided by Mr. Aktay, with a degree in poultry science, with the Papila Company interested in having an American company provide technical management inputs.

Project Implementation

The company wants to move as quickly as possible on the project. They will go ahead with the investment with or without U.S. participation but would prefer American inputs.

Foreign Partner Inputs

The company is open to proposal regarding foreign financial, technical and/or equity participation.

Pre-Investment Profile

Ref: Turkey 822

INTEGRATED BROILER PRODUCTION

Project Description

The project will consist of an integrated broiler production project with capacity planned to start at two million birds per annum and reach 10 million in the fifth year of operation. It will be located near Adana in the Cucurova Valley of Turkey.

The project principals are the Tavas A.S. Company, Mr. Bulent Paksoy, General Director and owner. At the present time, Tavas is one unit of a family owned and operated company and is involved in the production of eggs and the operation of a small feed mill. The layer operation consists of five houses with 16,000 to 17,500 birds per house, a six ton per hour feed mill and a slaughterhouse with capacity of 3,000 birds per day. Other elements of the family company include oilseed crushing and oil products manufacture, citrus, wheat, timber and woodworking.

A preliminary feasibility study has been completed. Paksoy is presently negotiating with a Danish company to take part of the equity, but would also welcome American equity and technology.

Financial Requirements

The project will require an estimated $12 million in capital investment. An associated contract outgrower scheme will need an additional $23 to $24 million.

The capital investment will consist of forty percent equity, 60 percent loans. The Paksoy's intend to put up the land, feed mill and slaughter house as their portion of equity. The foreign partner will need approximately $1.5 million. The company wants foreign equity rather than loans due to the effects of the continuing currency devaluation which makes the foreign exchange required to pay back the loan progressively more expensive.

The outgrowers facilities will be financed by the Turkish Agricultural Bank with the growers themselves expected to put up some 20 percent of the equity.

Technical Details

The project will include a grandparent and parent flocks, hatchery, outgrowers, slaughter plant expanded from the present size, a new feedmill, cold stores and byproducts processing facilities. Planning and technology will be supplied by the foreign joint venture partner.

Marketing Plan

All of the broiler meat is targeted to be sold on the domestic market. Paksoy feels that domestic poultry meat prices will continue to be higher than those offered by the export market for the foreseeable future. If market conditions warrant, however, exports will be a possibility. A separate marketing and merchandising company will be set up to handle the broiler meat marketing program and the company will develop its own distribution and marketing system and channels.

Project Inputs

Tavas associated oil seed crushing company should make it easier to obtain needed soybean meal. According to Bulent Paksoy, this is the only mill in the Adana region expressly designed to handle soybeans. Corn and other ingredients are also available locally with the exception of seasonal shortages of bloodmeal.

Project Implementation

The schedule for implementing the project depends on the progress of negotiations with potential joint venture partners.

Foreign Partner Inputs

Tavas would like to see 50 to 75 percent of the equity put up by the foreign partners. It also expects the foreign partners to supply the necessary technology and provide technical management, although Bulent Paksoy will serve as general manager. The foreign partners will also recommend and procure foreign supplied equipment.

Pre-Investment Profile

Ref: Turkey 823

FROZEN FOOD FACTORY

Project Description

The project will consist of a plant for processing and freezing various fruits and vegetables with a throughput capacity of 12,000 tons per year and cold storage capacity of 4,000 tons. First four years production is planned to be 50%, 60%, 70% and 80% of total capacity, respectively.

The project will be located near Bursad, a major fruit and vegetable producing area some 200 kilometres from Istanbul. It will be designed as a capital intensive operation utilizing as little labor as possible.

Project sponsor is the Romar Pazarlama Sanayi ve Ticaret Inc. company which is affiliated with a group of Turkish companies owned and controlled by the Cebi and Kabala families. Other companies in the group include Riza Cebi Company, Karadeniz Orme Sanayi Inc., Izoper Bakalize Levha Sanayi Inc., Mehmet Kavala Company, Mehmet Kavala Coll. Company, Menka Ticaret ve Sanayi Inc., and Sark Ithalat ihracat Ticaret ve Sanayi Inc.

Major lines of business carried on by the group at present include textiles; various manufacturing enterprises; mining; export of tobacco, hazelnuts, various foodstuffs and textiles to the Middle East; representation as Turkish sales agents for numerous international companies including British Steel, Kelvin and Ruston, GEC Diesel Engines and many other, primarily European, companies; and turnkey project representatives for foreign suppliers of power and chemical plants.

Annual sales turnover in export, import, representation and affiliated activities exceeds $400 million, in addition to other lines of business. Bank references include Turkiye is Bankasi, T.C. Ziraat Bankasi, Turkiye Vakiflar Bankasi, Akbank and others available on request.

The project feasibility study has been completed. The company is presently involved in discussions with potential joint venture partners from Denmark, Belgium and the Netherlands. They would, however, welcome participation by an American firm with the requisite capabilities.

Financial Requirements

Total required investment is estimated to be $4,000,000 for

capital costs and $1,000,000 in working capital. A loan equiva- to 60 percent of the required investment has been offered by Turkiye Is Bankasi A.L., with an effective annual interest rate of 23.50% including incentive refunds and blended Central Bank rate. The loan carries a three year capital repayment grace period and repayment term of five years, for a total repayment period of eight years.

Total equity requirement is thus approximately $2,000,000, with the foreign partner expected to take 40%. The company is, however, open to discussions on partnership and financing arrangements.

Technical Details

The plant will be equipped with modern, imported equipment including flow freeze tunnel and facilities for instant quick freezing of processed fruits and vegetables. It will be designed to handle both meat and poultry and fruits and vegetables. It will include 40,000 square feet of cold storage space.

Marketing Plan

Most of the production is intended for export to Europe and the Middle East, at least during the first few years of project operation. Turkey still lacks many of the elements of a modern cold chain, with few supermarkets, a general lack of cold boxes in grocery stores and a minimal number of home refrigerators. The company is already experienced in dealing with Middle East importers and anticipates no great difficulties in extending their marketing activities to frozen foods.

One of the advantages to locating at Bursad is that this is also the center of the Turkish juice processing industry. Thus fruits and vegetables that do not meet specifications for marketing in the form of frozen foods for aesthetic reasons (off-size, odd shapes, etc.) will find a ready market among vegetable and fruit juice processors.

Project Inputs

Raw materials will be contracted for from primarily small growers in the project area. Contract growing schemes are already widely used in this area by juice manufacturers so there would appear to be no particular problem in setting up this type of scheme for the frozen food plant. Since this is one of the centers for fruit and vegetable production in Turkey there is no anticipated raw material supply problem. Labor requirements will be kept to a minimum and foreign technical management is being sought.

Project Implementation Schedule

The project will be carried forward as soon as suitable foreign partners are found and the necessary agreements negotiated.

Foreign Partner Inputs

A foreign partner is sought who has the technical capability and marketing knowhow to complement the resources and abilities available to the above business group. The foreign partner can negotiate exclusive marketing arrangements abroad on a commission basis in order to cover his investment expenses. Up to 40 percent of project equity is available to a suitable foreign partner.

This is a particularly promising project sponsored by a very successful and credit-worthy Turkish company. Interested American companies will have to move fairly quickly to forestall their European competitors.

Pre-Investment Profile

Ref: Turkey 824

SOYBEAN PROCESSING PLANT

Project Description

In the judgement of several knowledgeable observes, including John Baize, TDP Turkish Mission member representing the American Soybean Association, there exists in Turkey an opportunity to establish one or more soybean processing plants, either as all new facilities or by refurbishing existing oilseed crushing plants.

ASA suggests a plant of 800 metric ton per day capacity, to be located at either Adana, which will be the center of the domestic soybean industry, or at Izmir where the bulk of the Turkish poultry industry is presently located (although if present plans are realized, poultry production will in the future be much more widespread throughout much of Turkey).

The crushing plant would be combined with an oil refining plant for greatest economic viability. One of the locational requirements would be siting of the plant near a major port, since the bulk of the soybeans will have to be imported, particularly during the early years of the project. Both Adana (port of Mersin) and Izmir meet this requirement.

The following Turkish companies have expressed interest in joining with an American partner in such a venture. There are probably additional Turkish business groups with such an interest who have not yet been contacted.

Anadolu Endustri Holding A.S.: One of the largest Turkish business groups with interests ranging from beer brewing to automotive products, export and shipping services.

Koc Holdings A.S.: The Koc group is probably the largest business entity in Turkey. It is involved in many businesses with a wide range of foreign partners and licensing arrangements.

Ozkasikoi Flour Mills Ltd.: An Ankara based company presently engaged in flour milling and animal feed manufacture.

Karatas Yaq Sanayii ve Ticaret: Already involved in oil seed crushing and manufacture of margarine and ghee, in Adana area.

Atomkimya Sanayi Ve. Ticaret A.S.: Presently producing cake mixes and other prepared foods. Interested in constructing soyflour, textured soy protein plant in joint venture with U.S.firm.

Paksoy Ticaret ve Sanayi A.S.: An oilseed processing firm in Adana, which also manufactures margarine, vegetable ghee, refined oils, bakery fats, shortening and soap. Would like to expand and improve operations.

Financial Requirements

The following financial requirements are estimates prepared by ASA. Equipment for an 800 metric ton per day soybean crushing plant will cost approximately $2.1 million. Installation will require an additional $2.73 million, for a total investment of $4.83 million.

A refining plant with capacity of six metric tons per hour will require an investment of approximately $4 million for equipment and installation. In addition, storage capacity for 30,000 tons of soybeans and 2,000 tons refined bulk oil (minimum(will be needed. An additional 10,000 tons meal storage capacity must also be installed. The storage requirements will of course add to total capital costs. Another major cost category will be inventories, with a 50 day supply of 40,000 tons brought in with each shipment.

Most of the business firms listed above, who are among the largest and most capable in Turkey, prefer foreign investors to limit their investment to 40 percent of project equity.

Technical Details

Capacity figures are given above.

Marketing Plan

The body of this report provides an overview of the potential for the poultry industry and the critical requirements for soybean meal if this potential is to be realized, as well as defining soybean oil import needs, which are projected to grow rapidly as Middle East markets develop for Turkish vegetable oil products. The entire range of soy derived products including meat analogues and soybased snack foods represent a very large and totally unexploited opportunity.

Pre-Investment Profile

Ref: Turkey 825

INTEGRATED LIVESTOCK INDUSTRY

Project Description

The landowners in the region of Ceyhan, in the Cucurova area of Turkey, recently organized a corporation, Cuko-Et Corp., to develop regional integrated livestock projects as well as other industries related to livestock and poultry production. Ceyhan is a farming community with a population of about 60,000, located some twenty miles east of Adana, in one of Turkey's richest farming areas.

Cotton is still the main cash crop, although it is being gradually replaced by double cropped wheat and soybeans due to increasing production problems with the cotton crop. Most of the farmers in the area raise some livestock, primarily cattle, sheep and poultry. Since there is essentially no local industry of any scale except farming, the people of the area are quite anxious to bring in various agroindustries.

The corporation at the present time exists only on paper, but has access to substantial areas of land belonging to farmer-shareholders and once operational can expect to obtain considerable government benefits. Purpose of the organization is to:

Organize and stimulate the already locally present livestock and poultry production.

Improve the breed of the livestock by using western techniques.

To improve the quality of the meat obtained, which requires a modern animal feed plant.

Evaluate the soybean crop locally available or imported.

Improve seeds and make them available to farmers.

Find domestic and foreign markets for its products.

Foreign Inputs

The organization is seeking foreign cooperation in conducting feasibility studies and project planning, technical assistance, foreign financing, international marketing outlets or possibly joint ventures. First step will be a comprehensive feasibility study.

Pre-Investment Profile

Ref: Turkey 826

AGROINDUSTRY DEMONSTRATION PROJECT

Project Description

One of the most effective means of gaining a Turkish foothold for American agricultural technology, equipment, products and services while at the same time providing substantial benefits to Turkish agricultural and agroindustrial development would be to organize a model production and processing operation as a joint venture between Turkish farmers and the agribusiness firms and a consortium of American suppliers of the above products.

Such an operation would serve as a demonstration of modern technology, management, farming and processing operations. At the same time, while "model" and "demonstration" are used above to describe the concept, the operation should be a commercially and financially viable venture that returns reasonable profits to its participants.

The agroindustry demonstration venture should be able to count on the full support of both governments as well as that of the U.S. and Turkish corporate and grower participants. The benefits accruing from project demonstration effects could range far beyond the immediate venture and influence the wellbeing of much of the Turkish agricultural community as well as providing an effective merchandising tool for the American corporations involved.

It is recommended that such a project be located in the Cucurova region, because of its rich agricultural potential, present level of agricultural development and the support already voiced by people in the region for such a concept.

Project Description

It is recommended that the project be designed as a combination soybean and corn production and processing venture, such these are a priority area that will govern effective development of the Turkish poultry and livestock sector and that also lend themselves to broad production utilization along food and industrial lines.

Cropping could be done in rotation with either wheat or cotton. Subsidiary ventures such as an integrated poultry and/or livestock operation can be added as desired. In any case, the project should be designed as an integrated system--the Corn-Soybean Production System (CSPS).

The American corporate participants might include companies producing seeds, farming equipment, pesticides, irrigation equipment, metal structures such as grain storage bins, corn and soybean processing equipment, poultry equipment, breeder stock, corn and soybean processing firms.

Dr. Ibrahim Atakisi, Head of the Department of Agronomy at C.U. Ziraat University, Adana and one of the pioneers in promoting establishment of a Turkish soybean industry, has offered his and the University's services in helping organize the necessary elements on the Turkish side. Ismet Bakula, the largest landowner in the region, has also offered to take part, thus making available a basic block of land consisting of a sizeable area as the nucleus of the project.

Project Implementation

The steps required for project implementation are as follows:

1. The project approach should be determined, U.S. government agency support lined up, agreement reached in principle with the Turkish government authorities concerned and expressions of interest obtained from U.S. firms.

2. TDP and OPIC are the most logical agencies to provide leadership, feasibility funding and in the case of OPIC, loans and financial guarantees for the U.S. participants.

3. A feasibility study, conducted with the cooperation of the prospective principals, will be necessary before the project goes forward.

Objectives

If properly conducted this project can provide a significant boost to Turkish grain and livestock development, to the prosperity of the Cucurova region and to the Turkish farmers and firms directly involved. On the U.S. side it would represent a solid accomplishment in terms of mutually beneficial economic cooperation between the two countries and would establish the base for greatly increased inputs of U.S. technology, goods, products and services in the agricultural and agroindustrial area.

SPECIAL PROJECT

BEEF AND DAIRY SECTOR STUDY

Based on rapid increases in exports to the Middle East, the Turkish livestock and dairy industry is set for rapid development and modernization. The government is turning to the Turkish private sector to accomplish this growth and modernization--witness the adoption earlier this year of a decree opening up meat slaughter and processing to private industry.

The livestock industry will require massive inputs of breeding stock, equipment, technology and feed ingredients if it is to successfully accomplish this growth. Industry people contacted during the TDP mission expressed a great deal of interest in U.S. participation in this area.

The Turkish government has expressed interest in receiving assistance from the U.S. in development of a beef and dairy sector study aimed at helping establish growth parameters for these important industries. It would be to the advantage of TDP's primary mission of increasing U.S. exports if this study were funded by the agency and conducted by U.S. experts.

This would help the Turkish government establish guidelines for industry development based on current status and future prospects; it would provide TDP with an inside understanding of the Turkish livestock sector; and it would provide a better base for U.S. private sector firms to take advantage of opportunities for future investment in and sales to the Turkish livestock industry.

Cost of a study is estimated to be in the range of $30,000. It could be accomplished in 30 days including two to three weeks of field study. The study should be conducted in mid-March, so that access can be assured to Eastern Turkey.

It is therefore recommended that TDP consider organizing and funding such a study, including recruitment of suitable experts on some type of personal service contract.

ANNEX II.

KEY CONTACTS

Companies expressing interest in joint ventures with U.S. firms with specific interests

Istanbul
Mr. R. Goldenberg
Altindag, Yatirim, Mumessillik Ticaret A.S.
Sisli, Buyukdere Cad. Palazoglu Sok.
Hamamcroglu Apt. 33.4 TLX: 23221 Adag tr
Istanbul Tel. 405331-410133-494931-518446

Frozen foods production and export

Atomkimya Sanayi Ve. Ticaret A.S.
Gumussuyu Cad. Litros Yolu No. 26
TopKapi/Maltepe, Istanbul Tel. 775670-770970-770971
Mr. Ozdemir Ali Yarar

Bulgar and soy-fortified foods

Anadolu Endustri Holding A.S.
Emirler Sok 3/1
Sirkeci, Istanbul Tel. 266407, Tlx: 22564 JAWA TR
Mr. Ustun Cevik

Beef feedlot and slaughterhouse; soybean processing plant

Koc Holding A.S.
Meclisi Mebusan Cad. 53
Findiki, Istanbul Tel. 432900-495345. Tlx: 24218 KOC TR
Dr. M. Nusret Arsel, Director

Soybean processing, various other ventures

ENKA Holding
Balmumcu, Bestekar Sevki Bey Mah
Besiktas, Istanbul Tel. 663490-662215, Tlx: 26139
Mr. Faruk Cengic

Integrated poultry project, other ventures

Alarko Holding Company
Gonen Gida Sanayi A.S.
Buyukdere Cad. Maslak Meydani No. 37
Ayazaga, Istanbul Tel. 642275-681120, Tlx: 26242 ALHO TR
Mr. Mesut Zaloglu

Frozen food, flour milling, other ventures.

Papila Su Orunleri ORetimi ve San. Tic. A.S.
Meclisi Mebusan Cad. 81-83 Somer
Han Kat : 3, Kabitas, Istanbul Tel. 437455-495130
Mr. Hansan Papila Tlx: 24710 PAP TR

Integrated poultry operation with feedmill

Suzer Group of Companies
Tel. 451330-4, Tlx: 24894 SUZE TR
Mr. Huseyin Suzer

Frozen foods

Tekstiplik Sanayi ve Ticaret A.S.
TopKapi Cirpici Yolu No. @, Istanbul Tel. 769920, 764972
Mihael Levi Tlx: 22677 idar tr

Frozen foods

Transturk Idil Insaat ve Mohendisik A.S.
Cumhuriyet Cad. No. 1/5
Taksim, Istanbul Tel. 434916--492904--440320, Tlx: 24164 TTEK TR
Mr. Cenan Sahir Silan

Livestock production, processing, export, poultry venture

Zihni Holding Inc.
Buyukdere Cad. Nevtron Han No. 119
Gayrettepe, Istanbul Tel. 677900/9, Tlx: 23328 ZIHNI TR

Feed manufacture and marketing

Ankara
Gama Endustri Tesisleri Imalat ve Montaj A.S.
Ataturk Bulvari 229
Kavaklidere, Ankara Tel. 286110, Tlx: 43290 GAMA TR
Mr. Yuksel Erimtan

Integrated poultry venture

Ozkasikci Flour Mills Ltd.
Samyeli Sokak 8
Iskitler, Ankara Tel. 113218-117971 Tlx: 42874

Soybean processing plant

Yazar Pump and Machine Ind. Co. Inc.
Mithatpasa Caddesi No. 16
Yenisehir, Ankara Tel. 173267-173348, Tlx: 42199 YZR TR
Mr. Mehmet Yazar

Pumps, other irrigation and agricultural equipment

Adana Area
Bakirli Koll. Sti.
Valiyolu, 16 Adana Tel. 134444, Tlx: 21930
Timet Bakirli

Various agricultural ventures

Cukonam
P.O. Box 148
Attaturk Cad, Park Apt. Kat. 1
Adana Tel. 16252-11481-12877, Tlx. 62137 CUKO TR
Mr. M. Cem Baysan

Fruits and vegetables, hybrid seeds.

Karatas Yag Sanayii ve Ticaret
P.K. 151, Adana Tel. 949596, Tlx: 62232 TAS TR
Mr. Mehmet Y. Yaltu

Oilseed processing

Paksoy Ticaret ve Sanayi A.S.
P.K. 144, Adana Tel. 14666/7/8, Tlx: 62150 SADE TR
Ibrahim Paksoy

Oilseed processing

Tavas A.S.
P.K. 144
Saygan Ishani 38/1, Adana Tel. 14666, Tlx: 62150 SADE TR

Integrated broiler operation

Dr. Ergun F. Sabar
Suleyman Bey Sokak No. 28/1
Istanbul Tel. 484756
(Cuko-Et Corp., near Adana)

Integrated poultry and livestock projects

Izmir
ANPA Group
Cumhuriyet Bulvari 136/1
Izmir Tel. 254444/45/46
Mr. Cevat Noonan

Olive oil, biscuits, dehydrated products

Dip. Eng. (ITU)
Cumhuriyet Bulvari 135/6
Izmir Tel. 218821-218825, Tlx: 52767
Mr. Huseyin Pekcan

Manufacture of agricultural equipment, machinery

Karteks Ticaret ve Sanayi A.S.
GaziBulvan 47/49, Izmir Tel. 905114, Tlx: 52275 KRTX TR
Mr. Ergun Ozakat

Dried fruits, other agricultural ventures

Kavadarli Tutun ve Makina
Izmir
Mr. Necati Kavadarli

Tanor Poultry Industry
Efes Is Sarayi, 1379 Sokak 57/41, B/Blok
Izmir Tel. 145949
Mr. Yaver Zeytinoglu

Hatching and table eggs, feed manufacturing, chicken meat

Turkiye Yag ve Mamulati A.S.
Sair Esref Bulvari, No. 48
Tuzcuoglu Is Hani, Izmir Tel. 145320
Mr. I. Sevki Figen

Vegetable oils, margarine

Mr. Erol Urfali
Attaturk Cad. No. 206/8, Derya Apt.
Alsancak, Izmir Tel. 220793

Represents farmers of Tire region

Yasar Holdings A.S.
Sehit Fethi Bey Cad 120
Izmir Tel. 142360
Dr. Ali Nail Kubali

Cattle feeding, dairy, feed manufacturing, various enterprises

Government Officials

Dr. Husnu Dogan, Director
Dr. Namik Kemal Kilic, Advisor
Directorate of Foreign Investment
State Planning Organization Tlx: 42110 DPT TR
G.M. Kemal Bulvari No. 16, Ankara Tel. 292006, 297576

Prof. Dr. Tabahattin Ozbek
Minister of Agriculture and Forestry

Dr. Rahmi Onen, Chairman
T.C. Ziraat Bankasi (Turkish Agricultural Bank)

ANNEX III

U.S. COMPANY LISTS

Horticulture--Fresh and Processed Fruits and Vegetables

Beatrice Foods Company
Two North LaSalle Street
Chicago, Illinois 60602 (FP)

Campbell Soup Company
Campbell Place
Camden, New Jersey 08101 (FP)

Coca-Cola Company
310 North Avenue, N.W.
Atlanta, Georgia 30313 (FP)

Del Monte Corporation
P.O. Box 3575
San Francisco, Calif. 94119 (FP)

General Foods Corp.
250 North Street
White Plains, N.Y. 10023 (FP)

Green Giant Corp.
Hazeltine Gates
Chasko, Minn. 55318 (FP)

H.J. Heinz Company
P.O. Box 57
Pittsburgh, Pa. 15230 (FP)

Libby, McNeil & Libby
200 S. Michigan Avenue
Chicago, Ill. 60604 (FP)

Nabisco Brands, Inc.
625 Madison Avenue
New York, N.Y. 10023 (FP)

Pet, Inc.
400 S. Fourth St.
St. Louis, Mo. 63102 (FP)

Quaker Oats Co.
345 Merchandise Mart
Chicago, Ill. 60654 (FP)

Stokeley-Van Camp
941 N. Meridian St.
Indianapolis, Ind. 46206 (FP)

United Brands Co.
1271 Avenue of the Americas
New York, N.Y. 10020

ACCO Seed Company
P.O. Box 307
Belmond, Iowa 50421 (S)

Asgrow International Corp.
Kalamazoo, Mich. 49001 (S)

Neuman Seed Company
P.O. Box 1530
El Centro, Calif. 92243 (S)

Jacklin Seed Company
West 5300 Jacklin Ave.
Post Falls, Idaho 83854 (S)

Pioneer Hi-Bred Intl. Inc.
1206 Mulberry St.
Des Moines, Iowa (S)

NewAg Corp.
888 N. Sepulvada Blvd.
Suite 614
El Segundo, Calif. 90245 (FS)

M. Singer's Sons Corp.
Hunts Point & E. Bay Ave.
261-263 NYC Terminal Mkt.
Bronx, N.Y. 10474 (FS)

SRDI Inc.
108 N. Main St., Suite 203
Logan, Utah 84321 (FS)

FP: Food Processor
S: Seed Company
FS: Fresh Produce Sales

A. Duda & Sons, Inc.
Highway 426
Oviedo, Florida 32765

Annex III (Cont).

Livestock and Poultry

Agway Inc.
Box 4933
Syracuse, N.Y. 13221 (LP)

American Breeders' Service
Rt. 1, Box 459
DeForest, Wis. 53532 (LS)

AZL Resources, Inc.
P.O. Box 29008
Phoenix, Ariz. 85038 (LP)

Borden, Inc.
277 Park Ave.
New York, N.Y. (DP)

Cargill, Inc.
Cargill Bldg.
Minneapolis, Minn. 55402 (PP)

Carnation Intl.
5045 Wilshire Blvd.
Los Angeles, Cal. 90036 (DP)

ConAgra, Inc.
Omaha, Neb. 68131 (PP)

Foremost-Mckesson, Inc.
Foremost Plaza, 1 Post St.
San Francisco, Cal. 94104 (DP)

Far-Mar-Co, Inc.
Box 1667
Hutchinson, Kan. 67501 (LP)

Gold Kist, Inc.
244 Perimeter Ctr. Pkwy, N.W.
Atlanta, Georgia 30346 (PP)

Holstein Assn.
1 South Main St.
Brattleboro, Vt. 05301 (DP,DS)

Land O'Lakes
P.O, Box 116
Minneapolis, Minn. 55440 (DP,DS)

Monfort of Colorado, Inc.
P.O. Box G
Greeley, Colo. (80632 (LP)

Peavey Company
730 2nd Ave., South
Minneapolis, Minn. 55402 (LP)

Ralston-Purina Intl.
Checkerboard Square
St. Louis, Miss. 63118 (PP)

Tyson's Foods, Inc.
2210 W. Oaklawn Drive
Springdale, Ark. 72764 (PP)

LP: Livestock Producer
LS: Livestock Services
DP: Dairy Producer
DS: Dairy Services
PP: Poultry Producer
PS: Poultry Services

Annex III(Cont.)

Equipment Suppliers

De Laval Ag. Division
Alfa Laval, Inc.
350 Dutchess Turnpike
Poughkeepsie, N.Y. 12602 (DE)

American Can Company
American Lane
Greenwich, Conn. 06830 (FS)

Blount Industries
P.O. Box 949
Montgomery, Ala. 36102 (ES)

Butler Mgf. Co.
P.O. Box 917
Kansas City, Mo. 64141 (MS)

California Pellet Mill Co.
1800 Folsom St.
San Francisco, Cal. 94103 (ME)

Cherry-Burrell, Inc.
20400 Sixth St., S.W.
Cedar Rapids, Iowa 52406 (DE)

Continental Can Intl. Co.
4 Landmark Square
Stamford, Conn. 06901 (FS)

Lindsay Intl. Corp.
3050 Post Oak Blvd.
Suite 1660
Houston, Texas 77056 (IE)

M-E-C Company
Box 330
Neodesha, Kan. 66757 (LE)

Pascoe Bldg. Systems
P.O. Box 2628
Pomona, Cal. 91766 (MS)

Rainbird Sprinkler Mfg. Co.
7045 N. Grand Ave.
Glendora, Cal. 91740 (IE)

Read Steel
P.O. Box 7343-A
Birmingham, Ala. 35253 (MS)

Sargent Pump and Irrig. Co.
1155 S. Broadway
Othello, Wash. 99344 (IE)

Simon-Johnson, Inc.
2519 Madison Ave.
Kansas City, Mo. 64108 (PE)

Sprout-Waldron & Co.
Muncy, Pa. 17756 (LE)

Valmont Industries
Valley, Nebraska 68064 (IE)

DE: Dairy Equipment
DP: Dairy Production
ES: Engineering Services
FS: Food Services
IE: Irrigation Equipment
LE: Livestock Equipment
MS: Metal Structures
PE: Poultry Equipment