

2) Promising market

The main potential markets of this cluster's end products (chicken, pork) are put together in Tables 7 and 8.

Table 7 Chicken Market

Potential market country	Domestic consumption (1000 t.)	Growth rate in domestic consumption (%)	Import (1000 t.)	Growth rate of import (%)	Main exporting countries
Argentina	932	37.5	57	21.3	Brazil
Brazil	4,381	57.5	0	-	
Mexico	2,047	29.4	238	48.8	USA
Germany	823	22.8	113	13.0	France
Russia	1,234	-15.9	600	210.9	USA
Kuwait	83	361.1	55		Brazil
Saudi Arabia	699	28.7	265	0.8	Brazil
UAE	76	8.6	102	200.0	Brazil
Republic of South Africa	1,185	79.8	82	215.4	
Japan	1,735	-1.6	543	35.1	China, Thailand
South Korea	487	25.2	49	145.0	China
Singapore	128	16.4	66	13.8	Thailand
Taiwan	770	32.8	27		Thailand

Note: USDA "World Market and Trade", Domestic consumption and Import are the figures in 1999.
The growths of domestic consumption and import : $(1998/1993 - 1) \times 100$

Table 8 Pork Market

Potential market country	Domestic consumption (1000t.)	Growth rate in domestic consumption (%)	import (1000t.)	Growth rate of import (%)
Mexico	1,035	12.9	110	120.0
Brazil	1,666	36.8	1	0
Russia	1,834	-30.8	350	59.1
Japan	2,097	0.5	814	24.7
South Korea	970	27.0	124	6100
Taiwan	925	8.6	60	∞

Note: USDA "World Market and Trade", Domestic consumption and Import are the figures in 1999.
The growths of domestic consumption and import : $(1998/1993 - 1) \times 100$

The chicken market has two categories: one imports whole chicken and one imports chicken parts. Saudi Arabia, Kuwait and Argentina can be categorized as the former market, and most markets in Asia and the EU belong to the latter. The export price of the former is around US\$1,000, while the latter is around US\$1,700 (1998).

In Brazil, chicken export of the former category accounts for 55 % and the latter represents 45 %. The

main destination countries are Saudi Arabia, Argentina, Kuwait, UAE, Japan, Netherlands, Germany and Spain. It is presumed that potential markets for Paraguay would be the same as Brazilian markets.

Paraguay may have advantages over Brazil in following two points.

- Since labor costs in Paraguay are about 30% lower than those of Brazil, Paraguay would be advantageous cost wise in the case of parts meat that requires labor.
- Soybean can be procured at especially low cost. It is possible to produce good tasting chicken by increasing the ratio of soybean in the feed.

Japan, the United Kingdom, Germany and Spain can be markets to make the most use of these points.

2.2.3 Tasks to strengthen the cluster's competitiveness

(1) Raw materials

1) Efforts to improve quality, as a pre-requisite for the differentiation of products

The main differentiating factor of Paraguayan soybean, wheat and corn competitiveness is quality. For example, a test carried out at CETAPAR, in which cattle was fed with soybean pellets (mixed feed raw material), reports the following results: when mixing soybean pellets with hay at a concentration 10%, 30% and 50%, during three months from August to November, an increase in the cattle's weight was obtained by 60kg, 67kg and 92kg, respectively, plus the quality of the meat seemed to have improved. This result is due to the high protein content in Paraguayan soybean pellets, showing the product's high quality as mixed feed raw material.

However, as was previously mentioned, direct sowing implies an increase of the cost of agro-chemicals, since it uses a greater volume of chemicals. The USA introduced genetically modified (GMO) seed in 1996, and currently more than 50% and 30% of the soybean and wheat, respectively, is produced with GM seeds. The advantage offered by GMO is the reduction of the cost of agro-chemicals by 15%. However, great controversy has risen in the EU and in the USA in regard to the safety of these products.

The production of crops that serve as mixed feed raw materials in Paraguay, must be promoted basically in the scheme of direct sowing in order to differentiate their products before other countries where GMO farming is allowed, preservation of the ground and reduction of machinery cost. However, it is also necessary to consider the problem of residual agro-chemicals as a risk factor.

To improve the quality of products, more efforts should be put in the improvement of the variety of seeds. Even though so far these efforts have turned more towards the yield increase, in the next stage the experiment should focus on an integral improvement, including the production of wheat and corn as well, which will adapt more easily to the crop rotation and would be, at the same time, resistant to weed. These components not only contribute to improve yield and quality, but also to reduce production cost.

2) Difference in cost of the administration of farms

Behind the efforts in the production of mixed feed and the processing of agricultural products by the cooperatives in the main producing areas of soybean, wheat and corn, is the need to not minimize risks to which farms are exposed before the price fall of soybean in the last years. In other words, there is a need to vary production activities through the incorporation of cattle raising to the farm's administration system. There is a substantial difference in the soybean production cost (in the case of a supposed yield 2.5 ton/ha) according to farms. For example, in the Cooperative Iguazu where the partners' average farming surface is 350ha, the production cost is Gs. 650,000, while in other areas with an average farming surface of 90 ha, the cost is Gs 910,000. Colonias Unidas, where the partners' average farming surface is 250ha, has average costs of Gs 820,000. This remarkable breach in production costs is due mainly to economies of scale, which reduces the unit cost of agro-chemicals, fertilizers, agricultural machinery, etc.

Wheat production depends on the type of crop rotation combined with soybean. Corn is also recommended to be combined with soybean and wheat in order to preserve agricultural lands and keep the productive capacity of the land. It has been proven that the constant rotation of crops contributes to reducing costs of fertilizers and agro-chemicals in the medium and long-term. A good example is the Cooperative Iguazu, which has fully implemented and spread the system of crop rotation of soybean and wheat. Reduction of costs in this organization is the result of the combined effects of economies of scale and the rotation of crops.

3) Relationship between areas of production of raw materials for the mixed feed and the small-scale farmers - issues to be considered in the introduction of small-scale farmers to the clusters.

As has been mentioned, soybean, wheat and its sub-products are raw materials for the mixed feed, which are adequate enough for medium and large producers from the administrative point of view due to the advantage of the production cost by the benefit obtained, and the cultivation area. Therefore, for the strengthening of the productive competitiveness of such raw materials, an increase of production must be promoted considering medium-scale farmers as the production nucleus. It is also considered that the

main production area mentioned before already counts with results in regards to the production of raw materials and they are launched towards the development of the agro-industrialization of the system of agricultural cooperatives, being the most suitable.

On the other hand, how to carry out the participation of small-scale farmers in the clusters, which represent the majority, is an issue to be considered in the promotion of the mixed feed cluster. The participation of small-scale farmers is essential to achieve constant stability in the agricultural region and rural society.

Raw materials for mixed feed, corn and cassava, are already produced by small-scale farmers, so their introduction could be carried out in a relatively easy manner. However, in the case of corn, production yield of small-scale farmers is 2.5ton/ha, in comparison with the commercial production yield of 5.0ton/ha. This is due mainly to the difference in investment in inputs of production and the technique of using fertilizers. Support for financing agricultural production and new techniques is essential for the improvement of such a problem, and for which the organization of farmers or the association of farmers to the existing cooperatives is considered effective.

Some cooperatives which were investigated by the study team are already carrying out pertinent tasks for the association of small-scale farmers settled in the surrounding areas. However, it is impossible for many small-scale farmers, within or outside the cooperatives, to access financing for production. Private agricultural financing also requires that small-scale farmers have property title as a categorical condition. Hereinafter, it is considered that the most efficient way to promote the participation of small-scale farmers in mixed feed cluster is through the organization of farmers, and training of the existing cooperatives, for which support based on the reform of the land territorial issues such as the fast execution of the registration of properties or the understanding of the reality of landless farmers is required.

(2) Processing

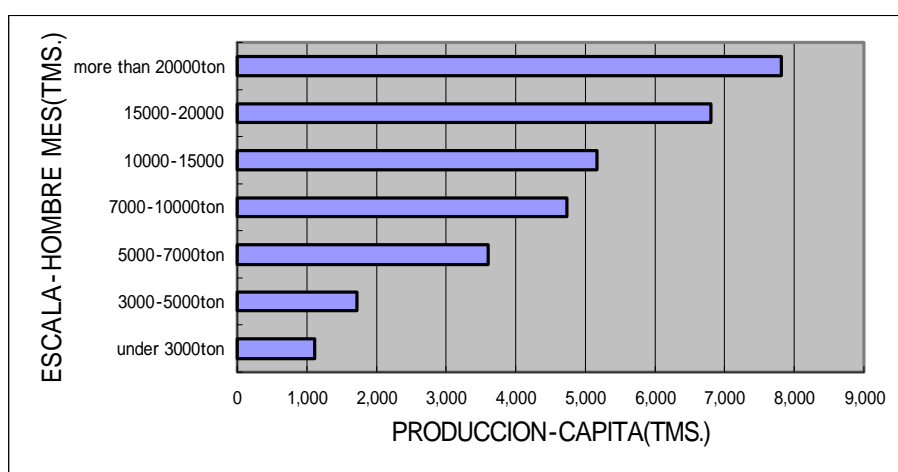
We discuss tasks of this cluster in the manufacturing industrial sector in three aspects: the feed plant, chicken production and the chicken meat plant.

1) Feed plant

In discussing the mixed feed plant, we will take up the productivity of the feed and shipping method of the feed to poultry farmers. Shipping method is an important factor that is connected with packing cost and freight.

The productivity of the feed plant is examined in terms of per capita production. Figure, which is based on Japanese data, shows per capita annual production broken down by plant output scale. It demonstrates scale economies evidently. According to the figure, the productivity of plants with the eight-hour-day system and less than 5,000 tons of monthly output appears extremely lower than larger plants in scale. If the output surpasses 20,000-ton-level, the productivity is almost twice as much as the plant with the output between 5,000 tons and 7,000 tons. The larger the scale is, the better the productivity is. However, in the case of the plant with a large output, feed must be distributed widely, which would raise freight cost. Although it is necessary to conduct more detailed investigation in order to determine the productivity accurately, we presume that about 5,000 tons of annual production would be the most productive plant scale in Paraguay.

Figure 3 Per Capita Annual Production by Plant Output Scale



As for the second factor, shipping method, there are three methods: bulk delivery on the single-purpose truck, transport-bag, and paper bag. In the case of bulk delivery, single-purpose truck is essential, and the poultry farmer must have storage facility to receive it. However, bulk delivery has two advantages that leads to cost reduction; a) It does not require packaging materials, therefore, packaging process is not necessary. b) It can save the process of loading and unloading. Paper bag delivery costs most. Trans-bag is in-between. In Paraguay, paper bag (or plastic bag) method is most common at the moment. In the long run, bulk delivery is the most desirable in order to cut cost of feed.

2) Chicken farming

It is common that poultry farmers buy chicks for broilers from breeders. This practice is essential to raise broilers under the same conditions in a given period. There are domestic companies that farm chicks, but they are small in scale and have problems in quality. In the case of chicks for egg collection, poultry farmers import eggs from Brazil. They do not buy chicks in Paraguay due to following reasons; a) The production scale of domestic breeder is small; b) Quantity and quality of eggs are fall behind Brazil.

However, if they depend on import for chicks (commercial chicken) , competitiveness of chicken meat cannot be strengthened. Chicken raising steps are as follows. a) Breeder's stock lay eggs of original stock. b) Original stock produces pure breed. c) Pure breed deposits eggs of breeding hen. d) Eggs of breeding hen are raised to commercial chicken sold as meat. From 40 to 50 breeding hens are produced from a pure breed. From 130 to 150 commercial chickens are produced from a breeding hen. The bottom line is that one pure breed produces 6,000 commercial chickens. Therefore, importing pure breeds instead of breeding hens can reduce cost. It is necessary to produce breeding hens and commercial chickens from imported pure breeds in order to raise productivity.

3) Chicken plant

The largest chicken plant in Paraguay belongs to Central-department-based Pechugon, which processed 17.2 million chickens and produced 30,000 tons of chicken meat in 1998. This company used to export to Argentina, but it is domestic-demand oriented in principle. However, it is necessary to build a chicken plant in this district so as to develop the mixed feed cluster in Itapua and export products.

In Thailand, there are nine chicken exporting companies. Two of them produce about 20,000 tons in a year respectively. Annual production of other companies is between 50,000 tons and 60,000 tons. According to these figures, plant scale that is almost equivalent to Pechugon is required to have competitiveness.

(3) Influence on the environment

The processing section of this cluster will be accompanied by wastewater and waste parts (blood, feather, internals, bones and so on). Since wastewater includes organic matter, wastewater disposal facilities must be built in plants. Waste parts will be processed more into the mixed feed and fertilizers. We should consider the fact that beef plant in Paraguay does not treat waste water sufficiently and oblige plants to have wastewater treatment facilities completely. On the other hand, it is required to institute tax advantage to the investment on such facilities. In many countries, there are problems in poultry

farming and pig raising. Fowl droppings can be dried to make organic fertilizer, but bad smell can be a problem in pig farming close to residential areas. In this regard, Paraguay, with a large land, may have little problem. It holds true to bad smell of pig raising. As excrement of the pig has more water content than fowl droppings, it would be more difficult to dispose it if it were dumped.

2.2.4 Strategy to strengthen competitiveness

We discuss what are required for the development of this cluster in terms of groundwork, investment promotion and differentiation of the products.

(1) Basic condition

It is necessary to lay the groundwork, which is scheduled to complete by 2003, in order to attract investment in this cluster or to seek for differentiation as the cluster. The groundwork includes developing conditions to facilitate the growth of the mixed feed market, animal quarantine that is required to export products of this cluster, settling bottlenecks of export procedures and instituting organizations to promote this cluster.

Establishment of mixed feed standard:

For the development of this cluster, sound growth of the mixed feed market is required. Since there is no official standard in the mixed feed components, the quality of mixed feeds on the market is uneven. It is necessary to establish official standards in this regard.

- Animal Quarantine and Settling Bottlenecks of Export Procedures

As export products of this cluster, we can assume chicken, pork, dairy products and mixed feed. As export destination countries, we can assume not only MERCOSUR countries including Brazil and Argentina but also Latin American countries, EU, the Middle East, Russia and Asian countries. Based on these assumptions, we must confirm following three points in terms of animal quarantine and export procedures.

- Eradication of Newcastle disease and pig pest

- Chicken and pork are subject to animal quarantine. However, negotiation with each target country is required. Whether they can be exported or not depends on each destination country's trust in Paraguayan quarantine system.

- Documents required for import procedures of a destination country are usually an invoice, a packing list and an animal quarantine certificate. Besides them, some countries demand a certificate of origin and a pre-shipping certificate. They should check on what documents are necessary.
- Promoting Organization
- The mixed feed cluster committee that is composed of representatives from the private sector, the central and local governments and the academics should be formed in this region to hold a regular meeting for opinion exchange. At the meeting they should discuss practical subjects; what is the issue of the region, how they should solve the issue, who should work for its solution and so on.

(2) Investment promotion

Investment promotion includes disseminating appeals of this cluster among actors and creating conditions that favor investments.

- Publicity work

They should communicate widely to companies, industrial organizations, governmental institutions and others concerned that the mixed feed cluster is promising and has good prospects in this region. Assuming that they would attract foreign capitals, publicity campaign should be conducted to mixed feed producers, chicken and pork farmers in neighboring countries.

- Incentive to investment

In order to attract meat plants constructions, they should establish special treatment better than what is provided by the 60/90 Investment Promotion Law. For instance, extension of corporation tax exemption period, introduction of extra depreciation system and priority assignment of industrialization fund can be thought.

(3) Differentiation of products

Chicken, pork and dairy products are the products of this cluster. In determining competitiveness of these products, not only quality and price but also differentiation of the products plays an important role. Following methods should be studied for differentiation that highlights features unique to Paraguay.

-Differentiation by feed

For instance, chicken meat without fish odor is produced in Brazil and Chile by increasing the ratio of soybean pellet replacing fishmeal in the mixed feed. It is possible to produce tasty chicken with less viable fungus by mixing herbs such as mint and stevia. Examples of such chicken are in Japan and France. If Paraguay exports that type of chicken under the quasi-official certification as "Paraguay Herb Chicken", that may be another competitive factor besides price. It holds true in pig, too.

- Differentiation by breed

In all over the world, farmers choose breeds of chicken, pig and dairy cow that can increase weight or milk with less feed efficiently. Since it is possible to get feed at relatively low price in Paraguay, it is easier for them to differentiate products by choosing breeds that can produce high quality meat and milk even though their feed efficiency is low. Broilers are generally raised for 45 to 50 days and slaughtered when they weigh 2 to 2.5 kg. However, some farmers in France or Japan succeed in business by raising breeds that can produce meat with differential quality in spite of its low feed efficiency. In the case of pig, Landrace, Big Yorkshire and Durock are commonly raised. These breeds grow fast and have high fecundity. However, Berkshire has good quality of meat. In Japan, Berkshire is referred to as "Kurobuta (Black Pig)" and traded at 20 % higher price than other breeds. In Paraguay, they should study the possibility of differentiation by making the use of Paraguayan advantage of low-priced feed.

2.2.5 Scenario for Strategic Development

The manner in which projects should be conducted to achieve growth in the mixed feed clusters will be clarified in this section, along with the inter-relationship between the projects. Alliances between public authorities and private sector industries will be important in the formation of the clusters. Private sector industries can then be divided into those with domestic capital and those with foreign capital. Here, both are dealt with on the same basis. Incremental scenarios for strategic development will be presented first. This is followed by proposals for pilot plans, which assume a central role for domestic capital. Finally, proposals are put forward for methods of attracting foreign capital.

(1) Scenario

Thailand is presented as a reference scenario for the growth of mixed feed clusters in Paraguay. Starting in around 1975, Thailand created an export base for chicken meat over a ten-year period. In the 1980's, the export of chicken meat contributed significantly to ensuing economic development. At the time, Thailand was an exporter of rice, maize and tapioca, and the cargo collectors (mainly Thais of Chinese heritage) of these agricultural products, which can be used as feed, pushed ahead with integration from

the production of mixed feed to poultry farming and the production of chicken meat. Policies adopted by the Thai government at that time to promote chicken meat exports are:

- Addressing the Issue of Price Slumps
 - Announcement of all regions across the nation as economic zones for production of broilers.
 - Registration requirements for persons involved in the broiler industry.
 - Requirement of stud-bird importers to apply for permission from the Livestock Bureau.
 - A 60% import tariff on processed meat to reduce imports and protect the domestic price of chicken meat.
- Policy for the Promotion and Expansion of Frozen Chicken Meat Exports
 - Abolition of the export levy of 0.5 baht/kg as of August 18, 1982.
 - Prescription of standards for frozen chicken meat products, and requirement for sampling and certification by the Livestock Bureau.
 - If certain qualifications are satisfied, even chicken meat processing plants could receive incentives from the Investment Incentive Committee (capital, excluding land and current assets, of at least 10 million baht, at least 60% of stock held by Thai nationals, production for export, etc.).
 - Aiming to expand the export market, negotiations were held with foreign governments to reduce trade barriers.
 - Support in the form of knowledge and advice regarding rearing methods, including prevention and treatment of diseases occurring in broilers.
 - Long-term, low-interest financing from private sector banks through public authorities BAAC and IFCT.

Although the rate of domestic consumption of chicken meat in Thailand was growing at around 10% per annum at the time, due to participation by new poultry farmers and chicken meat imports, the domestic price was not necessarily stable.

Nonetheless, the government decided that the issue of prices dropping needed to be resolved in order for latent competitive strength in chicken meat exports to come to the fore.

As far as chicken meat is concerned, the circumstances in Paraguay in the latter half of the 1970s were similar to those in Thailand. For this reason, a scenario for mixed feed clusters in Paraguay, using the history in Thailand as a reference, was developed as follows:

First Stage: 2000 - 2003. Mixed feed cluster preparation period. Resolution of animal quarantine issues. Enactment of standards for chicken meat. Export enterprise registration

system. Review of import tariffs on chicken meat products. Incentives for new investments. Market surveys. Research into appropriate poultry farming methods.

Second Stage: 2004 - 2006. Chicken meat export expansion and preparation for exports of pork, etc.. Export promotion policy. Resolution of animal quarantine issues relating to pork, etc.. Enactment of standards for pork, etc.. Research into appropriate pig farming methods.

Third Stage: 2007 - 2010. Export expansion and shift to high value-added products. Diversification of export destinations. Development of more differentiated products. Development of highly processed products.

In this scenario, the role of the government in the first stage is significant. An explanation appears in 2.2.4 of the most important of these government roles.

The Thai government also conducts the following to maintain and improve product quality:

* Export processing plants must conform to inspections of operators and the Livestock Bureau of the Ministry of Agricultural Cooperatives. In accordance with the Animal Quarantine Act, hygiene certificates must also be obtained each time exports are made. Apart from this, experts from trade counterpart countries are dispatched to conduct inspections on processing plants, processing procedures, packaging, water quality, and the quality of processed chicken meat. Products may be exported if certain standards are met.

* Processing plant inspection methods and sterilization techniques. The Livestock Bureau of the Ministry of Agricultural Cooperatives sets quality standards for processing plants and chicken meat, and manages them. At such times, the Bureau sends a Bureau veterinarian to the plants to inspect whether the plant, processing procedures and the chicken meat conform to standards. The inspection includes inspections of the chickens before slaughter, processing procedures, processing lines, packaging, and the storage conditions of freezers. In terms of sterilization techniques, harmless disinfectants such as chlorine water are used for cleaning. Veterinarians also conduct the following :

1. Inspection for microbes harmful to humans.

The following standards are used:

- E. coli: less than 5000 bacteria per gram.
- Staphylococcus aureus: less than 100 bacteria per gram.
- Salmonella: negative

General bacterial count no more than $5 \times 10^5/g$

2. Inspection for residual poisonous substances such as mercury and insecticides.
3. Meat quality inspection
4. Water content inspection on meat (no more than 8%).

(2) Pilot plans

The key to the development of this cluster lies in whether meat-processing plants can be established in appropriate locations. The main factors for this can be considered by separating them into domestic capital and foreign capital. Here, the former is discussed.

When mixed feed clusters are perceived as systems, the main constituent factors include feed grain producers, cargo collectors, feed plants, poultry and pig farmers, breeders, meat processing plants and exporters. Background support for these comes from such sources as MAG, the Quarantine Bureau, MIC and PROPARAGUAY. Pilot plans need to be centered on the key protagonists from among these. Meat processing plants are at the end of the cluster's supply chain and have a direct link with international markets. Investment is also high in comparison with other protagonists and they are also required to have a relatively high level of technology. In this sense, this cluster is not located in a suitable region for meat processing plants to be key protagonists.

In order to achieve export competitiveness, chicken meat plants need to process around 50,000 to 100,000 animals per day. To build a plant with this capacity would require an investment of between \$10 million and \$20 million. In Thailand \$6 million - \$7 million is needed just to build a 30,000 bird class plant, deemed to be the minimum capacity required for an exporting plant. The following two pilot plans may draw this kind of investment.

Proposal 1

Special incentives to promote the chicken meat industry for companies processing 30,000 or more birds daily. An example would be long-term, low-interest loans from public funds of half the amount of the investment. Another possibility is the provision of sites, either free or at very low cost. Expression of public infrastructure, such as roads and electricity. Zero import tariffs for machines and equipment. Five-year exemption from corporate tax, etc.. As the WTO treaty makes it difficult to provide clear advantages to specific industries, however, these incentives will have to be provided under the banner of developing domestic poultry farmers or encouraging feed grain production. It would also be advisable that regional governments play the central role in the incentives. Around \$5 million of public funds would be required for these. Approaches to industry should focus on farming cooperatives, feed plants and meat processing plants, with contact best being made through seminars and visits to individual companies.

Proposal 2

While the first proposal treats chicken meat as a commodity, this proposal puts forward a method of exporting differentiated chicken meat. For this reason, plants on the scale of those required in the first proposal, based on the merit of scale, are thought to be unnecessary. Plants with a daily processing capacity of 10,000 birds are envisaged (10 tons/day in terms of meat production), with investment in plants of approximately \$2 million. In this case, advance market surveys and export promotion will be vital in ensuring correct evaluation of differentiated products and their export feasibility. To this end, \$1 million will be required for the implementation of market surveys and export promotion policies through public backup, \$1 million for research into differentiation, and another \$1 million or so of public funds for plant investment promotion. The same type of plant investment promotion as in Proposal 1 will be adequate.

A grand design for mixed feed clusters must first be formulated and these kinds of pilot plans indicated in it. The schedule up to 2010 would be as follows.

Figure 4 Formation Schedule of Mixed Feed Cluster

	Preparation Period			Chicken Meat Export Expansion Period			Period of Export Expansion and Shift to High Added Value			
	2000 - 2003			2004 - 2006			2007 - 2010			
Formation of Promotion Organization	■									
Formulation of Grand Design	■									
Pilot Plans		■	■	■	■	■	■	■	■	■
Plant Investment Promotion Project		■	■	■						
Eradication Project for Newcastle Disease and Swine Plague		■	■	■						
Enactment of Mixed Feed Standards		■	■	■						
Public Relations Activities		■	■	■	■	■				

(3) Introduction of foreign Investment

Although the pilot plans in (2) focused on domestic capital in methods of cluster formation, another method is to attract foreign capital. This method has the advantage that companies coming in have already secured export markets. The chicken meat industry in Brazil has been centered on the outskirts of Sao Paulo and Santa Catarina. To ease feed grain procurement and lower the cost of operations, there have been moves recently to develop plants in the inland districts of Mato Grosso do Sul and Mato Grosso. As these two districts are adjacent to the Paraguayan states of Itapua and Alto Parana, it is fully possible that Brazil's chicken meat producers could establish plants in Paraguay if positive incentives for plants were formulated. In fact, a major mixed feed manufacturer in Itapua and a Brazilian chicken meat producer were seriously considering the construction of a chicken meat plant in Paraguay as a joint venture. They struck problems with Newcastle disease and animal quarantine, however, and the joint venture was cancelled once it became evident that it would be difficult to export products.

Public relations activities and the following methods should be employed to attract foreign investment:

- Make material for promoting foreign investment available at Paraguayan embassies and consulates overseas.
- Use home pages.
- Send direct mail and make personal visits to potential foreign manufacturers.
- Establish a "Paraguay Corner" at food fairs and industry body conferences held in foreign countries.
- Provide materials and interviews to meat industry magazines in target nations.

It is also necessary to make easy to understand investment invitation materials. Such materials should include the following facts:

- The advantages of Paraguay
- The raw material for feed, such as soy beans and maize, is 20 - 30% cheaper than the international rate.
- Products can easily be differentiated due to the low cost of feed. For example, tasty chicken meat can be produced through long-term fattening at a low cost, increasing the proportion of soybeans in feed and not using fishmeal can also be done cheaply.
- Low labor costs - some 30% lower than Brazil.
- Electricity costs are low.
- If Maquiladora is applied, imported equipment and machinery and imported raw materials (vitamins, packaging materials, foundation animals and stud birds, etc.) are tax free, there is no corporate tax, and exports can be conducted with zero tariffs within MERCOSUR.
- Incentives, such as in the first stage in (1) Scenario, have been prepared.

Procedures for Establishing Plants in Paraguay:

- Company establishment application, approval, number of days required.
- Plant construction approval application, approval, number of days required.
- Application procedures for infrastructure (electricity, roads, sewerage, etc.)
- Business approval application.
- Quarantine system, issuing procedure for inspection certificates.
- Import procedures for raw materials, machinery, etc.
- Procedures for Maquiladora applications.
- Advisory service for plant establishment and relevant government offices.

In order to conduct public relations of this kind, Newcastle disease must first be eradicated and it must be possible for inspection certificates to be issued. As such, public relations activities to attract foreign investment will be conducted once these barriers have been cleared by 2002, or just prior to this.