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Approved by:
Stan Cohen, Office Director
ATO Taipei

American Institute in Taiwan
Prepared by:
Jeff Miller, Reports & Marketing Officer

Report Highlights:

Quota limits again held imports of chicken products to about 2 percent of market demand through 1999. Realizing significant increases in market share in the most lucrative poultry segments continues to hinge on Taiwan's successful entry into the WTO and implementation of related post–accession market opening measures. High pork prices during 1999 better than doubled turkey imports - all from the United States - for use as pork substitute / filler in processed products. Local production decreased slightly due both to industry consolidation pressures and tepid consumer demand following Taiwan's September 1999 earthquake.

Includes PSD changes: Yes
Includes Trade Matrix: Yes
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Executive Summary

Poultry meat and eggs are pillars of the traditional Chinese diet. From kungpao chicken, Peking duck, and stir fries to Cantonese-style air dried duck, "1,000 year-old" eggs, and deep-fried chicken nuggets, Taiwan consumed upwards of 730 thousand tons of poultry meat (approximately 94% of this chicken) and 6.6 billion eggs during 1999. This translates into around 31 kg of poultry and 275 eggs per capita.

Conservative agrarian roots and the political "siege" mentality which prevailed through much of the post-WWII era led Taiwan authorities to pursue policies targeting food self sufficiency and protecting farmers from import competition. Only with Taiwan's maturation into a powerhouse of export manufacturing and high technology during the 1980s and 1990s did cracks begin to show in the armor protecting domestic farmers and their produce. A booming non-agrarian economy, labor flight to urban centers, changes in the Taiwanese diet, and the desire of authorities for international recognition of their island as a "free market" economy all helped to whittle down barriers to food imports. Even so, during the 1990s several key food categories, deemed of particular strategic or economic importance (including chicken meat and poultry offal among others), remained sealed off from foreign competition.

In bilateral talks held in the mid-1990s, US trade negotiators convinced Taiwan to partially lift the ban on imported poultry in preparation for Taiwan's entry into the World Trade Organization (WTO). Consequently, Taiwan consented from 1998 to open an annual import quota of 10,000 mt exclusively for US chicken meat.

In 1999, Taiwan allocated an additional chicken meat import quota of 9,163 mt permitting the import of chicken meat from any WTO member state (including the United States) meeting Taiwan's phytosanitary requirements. However, the method used to allocate this additional quota amount has, to date, prevented a significant portion (nearly 60% in 1999) from being utilized. During 1999, slightly less than 3/4 of the entire quota allocation (14,103 mt) was utilized, despite world chicken prices being at a significant discount to local market prices. The US agricultural attache office in Taipei is presently working to help make the total annual quota accessible to importers. (See section on Chicken, Trade Policy for further details.)

Once a WTO member, Taiwan will scrap the current, managed quota allocation regime and grant import quota allocations for chicken meat imports (as well as poultry offal) on a first-come-first-permitted basis within an expanding quota allowance. This is intended to help to ensure that present quota allocation issues will not remain a barrier to access. Presuming Taiwan is a WTO member by 2005, the island will abolish the quota system at the start of that year, leaving in its stead a flat import tariff of 20%.

The potential for growth in domestic consumption of poultry and egg products is limited. However, the significant cost advantages US producers enjoy over local firms (local sources say up to 50%) and an underlying current of consumer goodwill toward US-raised produce should help US suppliers win market share away from established competitors in this increasingly open sector of the market.

POULTRY

Production

Total poultry meat production in Taiwan during 1999 totaled 700 thousand mt, down 4 percent from 1998. The reduction reflects several factors, including (1) reduced demand, (2) the closure of at least several hundred smaller-scale farms, and (3) damage to capacity suffered during Taiwan's September earthquake. With the poultry belt running through the epicenter of quake activity (Taichung & Nantou Counties), official reports estimate quake-related loss to production in the poultry industry at NT$657 million (US$21 million)[1], including the death of around 1.4 million chickens. In the immediate aftermath of the quake, hatchling production was down over 100,000 head per day and egg production fell by 42,000 kg per day - around 5% of normal daily output.

Table. 1 Production, Supply, and Demand Table: Poultry (in 1,000 mt)

	1999	2000	2001
	New	New	New
Calendar Year Begin	01/1999	01/2000	01/2001
Inventory (Reference)	0	0	0
Slaughter (Reference)	0	0	0
Beginning Stocks	0	0	0
Production	699	730	730
Whole, Imports	0	0	0
Parts, Imports	33.2	30	35
Intra EC Imports	0	0	0
Other Imports	0	0	0
TOTAL Imports	33.2	30	35
TOTAL SUPPLY	732.2	760	765
Whole, Exports	0	0	0
Parts, Exports	3.1	2.7	2.5
Intra EC Exports	0	0	0
Other Exports	0	0	0
TOTAL Exports	3.1	2.7	2.5
Human Consumption	729.1	757.3	762.5
Other Use, Losses	0	0	0
Total Dom. Consumption	729.1	757.3	762.5
TOTAL Use	732.2	760	765
Ending Stocks	0	0	0
TOTAL DISTRIBUTION	732.2	760	765
Calendar Yr. Imp. from U.S.	0	0	0

[1] During 1999, one US dollar equaled approximately 32 New Taiwan (NT) dollars

Chickens dominate the poultry husbandry industry in Taiwan - accounting for around 75% of all commercial birds raised. Ducks follow a distant second at around 17%, with geese, turkeys, and game birds accounting for the remainder. During 1999, 380 million head of chicken were channeled into meat & offal production, while an average 35 million head were engaged as layers. In a similar ratio, Taiwan slaughtered 35 million head of duck while employing an average 3 million head in egg production. Eggs of poultry other than chickens and ducks are not produced on a commercial scale.

Promises made by Taiwan during WTO accession negotiations to open fully its chicken meat and poultry offal markets to international competition at the start of 2005 imply that domestic poultry producers - for so many decades insulated from global competition - must either adapt to the new competitive regime or concede to foreign competition a significant chunk of current sales. Attempting to help prepare the poultry industry for increasing competition, Taiwan authorities are in the process of implementing measures to 1) consolidate production, 2) modernize production and marketing, and 3) create consumer loyalty to local poultry products.

<u>Production Consolidation</u>: Authorities have adopted a combination of incentives & coercive measures (the latter focusing principally on enforcing widely-breached rules regarding zoning, business registration, and environmental protection) to shepherd the poultry industry toward production consolidation. In its highest profile effort to date, Taiwan's Council of Agriculture (CoA) offered to pay local hog and chicken farmers up to US$83,000 each to close farms, tear down facilities, and turn land over to other uses. Official records show that, between 1998 and mid-1999 (when the subsidy program ended), a total of 684 farmers took up the government offer and exited the chicken rearing business.

<u>Modernization</u>: Through the CoA and its several key research affiliates, Taiwan has ongoing programs targeting cooperative extension services for poultry farmers & processors and research into breed improvement & consumer product development.

<u>Customer Loyalty Programs</u>: Acknowledging that the broiler segment will face the brunt of coming foreign competition, authorities have been targeting other poultry categories (in particular, eggs and local chicken varieties [i.e., *tuji*]) with technical and marketing assistance to help these segments grow in value and realize gains in production efficiency. One component of this assistance is the introduction of certification marks "T-U-G" for local chicken varieties and "EGG" for locally-raised eggs. The hope is that, over time, consumer awareness of local products and demand for "unique" Taiwan poultry varieties (while as yet ill-defined as commercial breeds, these include varieties such as *tuji*, *wuguji*, and *fangshanji*)[2] will result in increased demand.

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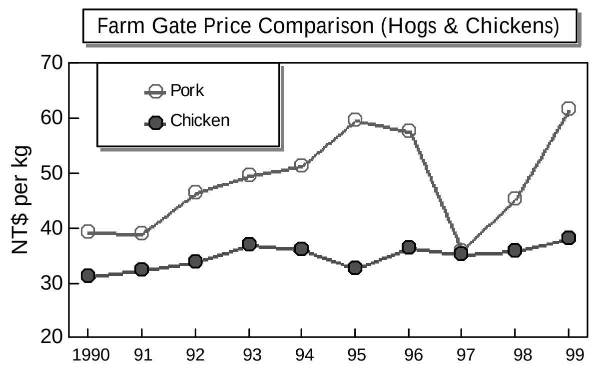
[2] For purposes of this report and unless otherwise noted, all local varieties are categorized under the generic name "*tuji*".

Consumption

The average Taiwanese consumed 75 kg of meat during 1999. The small drop from 1998 is attributed most immediately to the somber consumer mood following Taiwan's devastating September 1999 earthquake as well as to the lingering negative impact of the Asian Financial Crisis on consumer spending. Both factors should have a minimal effect on 2000 consumption, which can be expected to re-attain a positive growth trend - particularly for "healthier" meat items such as poultry.



Pork and broiler chicken meat are highly substitutable for one another in the staple of Chinese cooking - the stir fry. As such, domestic pork prices do impact chicken meat sales as higher prices for pork encourage consumers to switch from buying chilled pork cuts to buying chicken meat, and restaurants to alter menu offerings accordingly. The trend works in reverse when pork prices fall relative to chicken. Similarly, Taiwan food processors have increasingly used turkey thigh meat as a filler substitute for pork in traditional sweet sausages, hot dogs, ham, and other food items when pork prices rise relative to turkey. The sharp rise in frozen turkey meat imports during 1999 is attributed largely to the high pork prices seen in the first half of 1999. Finally, with a population increasingly aware of the benefits of a low fat, low cholesterol diet and a general perception of chicken as a "healthier" alternative to pork, some food retailers are now openly advertising their use of chicken, turkey, or fish as a complement or substitute to pork in processed food products.

Trade

Reflecting the present quota regime, which ensures non-Taiwan suppliers supply but 2 percent of broiler meat market demand and no foreign competition for the lucrative offal trade, imports of poultry items into Taiwan during 1999 remained at previous, subdued levels.

Statistics record that, of the 14.1 thousand mt of fresh/frozen chicken meat allowed in under quota during 1999, 84% was shipped from the US, with the remainder originating in Canada. During the same period, Taiwan imported 19.1 thousand mt of turkey meat (33% more by weight than chicken) - all from the United States. Customs recorded no duck or goose meat imports in 1999. Other poultry product categories saw minimal import activity. Live poultry imports totaled less than US$3.5 million in value and egg/egg product imports totaled under US$400,000. The US was the preferred source for live poultry, accounting for 65% of imported value (followed by Germany, Japan, and France). While the US was Taiwan's sole recorded source for the US$150,000 in stock eggs imported during the year, Taiwan purchased a small volume of preserved eggs and egg powders from a range of countries including Belgium, India, Japan, and Sweden.

Tables 2 & 3. Poultry Import and Export Volumes (in 1,000 metric tons)

Imports During	1999	2000
U.S.	30.9	31
Others		
Canada	2.2	1
Australia		1
Total for Others	2.2	2
Others not listed	0	
Grand Total	33.1	33

Exports During	1999	2000
U.S.		
Others		
Hong Kong	1.7	1.4
Japan	1.3	1.3
Total for Others	3	2.7
Others not listed	0.07	0
Grand Total	3.07	2.7

As in previous years, ethnic East Asian markets around the world purchased the bulk of Taiwan's poultry meat and egg exports during 1999. Eighty-seven percent of the US$4.7 million in fresh/frozen poultry meat & offal exports went to Japan. Hong Kong consumed the minuscule amount of preserved poultry meat Taiwan exported during the year, while the US$2.2 million in egg and egg product exports went primarily to the US (25%), Japan (14%), Singapore (30% - almost all breeding stock), Korea (11%), Canada (5%), and Hong Kong (5%).

Trade Policy

Current Tariff Rates for various poultry products are noted in the table below. Rates and WTO accession terms remain unchanged from the previous year.

Table 4. Current Tariff Rates for Poultry Meat

Product	Current	Accession	Final
Chicken Meat	40% (1)	25% (2)	20% (3) (Jan. 2004)
Duck Meat	35%	35%	35%
Goose Meat	40%	30%	25% (Jan. 2002)
Turkey Meat	10%	10%	10%
Egg Products	40%	30%	30%
Poultry Offal	banned	25% (2)	25% (3) (Jan. 2004)

1) 40% rate assessed on imports within quota. Imports outside quota regime are not permitted.
(2) Upon WTO accession, tariff rate noted will be applied to in-quota imports of quota-regulated offal items (guts, bladders, stomachs). Imports made outside quota restrictions will be subject to punitive tariff rates.
(3) This final tariff quota rate will be applied in 2004. All quota restrictions will end at the start of 2005.

The Impact of WTO

Taiwan's entry into the WTO should have several immediate effects on poultry import policy, including *re-classification of presently banned items* and *expanded quota access eligibility*. At the end of 2004, all poultry-related quotas will expire and any quantity may be imported subject to payment of tariff and adherence to phytosanitary restrictions.

Reclassification of Banned Items: Under present agreements, Taiwan will end the ban on certain offal items, including chicken feet & necks and all poultry livers & hearts, upon WTO accession. In its stead, Customs will assess standard tariffs of 25% for chicken livers, hearts, and feet, 30 ~ 45% for (non-chicken) poultry livers, and 40% for chicken necks and goose, duck, & turkey hearts. Other poultry offal (including guts, bladders, stomachs, etc.) will also come off the banned list, but become subject to a quota and 25% tariff rate.

Quota Access: Upon accession, Taiwan authorities have agreed to end their present practice of actively allocating quotas (i.e., granting a recipient a quota allocation without first confirming recipient intent to import under quota) in favor of a "first come, first permitted" system under which any importer may apply to import within quota limits. All initial quota purchase contracts should be signed prior to 1 September of the current year with delivery taken before 31 December. Quota volumes not contracted by 1 September will be reopened with delivery also required by year's end. This system is expected to help ensure committed quota volumes are fully used for each year.

Under current agreements, Taiwan will set an initial annual quota of 19,163 mt for chicken meat upon WTO accession (3.2% of current meat consumption). This quota will increase in equal annual increments to a final 45,990 mt in 2004 (7.7% of current meat consumption) - after which time the quota will be eliminated and replaced by a tariff rate of 20%. The poultry offal quota, noted above, will start at 1,836 mt upon accession and end at the close of 2004 with a 3,674 mt quota for that year. Any quantity of quota-controlled product imported above set quota limits will be permitted, but subject to high punitive tariffs.

Other poultry products presently permitted without quota restriction into Taiwan, including eggs/egg products, prepared poultry products, and non-chicken poultry meat will, in general, benefit from lower tariffs upon WTO accession.

CHICKEN

Taiwan's chicken production falls into two categories, namely US-style broilers and native / crossbred birds. The latter include native chicken breeds as well as chickens resulting from crossbreeding native roosters with broiler hens. While different names are used to identify the 3 ~ 4 major native / crossbred categories sold in market (including *tuji*, *wuguji*, and *fangshanji*) , the generic term "*tuji*" is used in this report to denote all native & crossbred categories, unless otherwise noted.

Production

Taiwan produced 615,000 mt of chicken meat in 1999, up slightly from the 608,000 mt produced the previous year. Gains made during the first half of the year were pared back during the second half of 1999 due largely to earthquake-related factors which depressed market demand and decreased production.

Of the 1999 production total, approximately 45% was broiler meat & offal and 55% was *tuji* meat & offal - the same ratio as last year. Ongoing government efforts to shift a portion of current chicken rearing resources away from broilers and toward *tuji* is showing some impact in that oversupply of *tuji* into the market during the first half of 2000 resulted in collapsing prices for the latter and calls for government price supports.

Government statistics report that about 3 of every 4 broilers are slaughtered and processed in modern, sanitary facilities. Only 6% of *tuji* are similarly handled. The remainder are processed either in small, low-tech processing plants or killed & dressed in the many traditional wet markets. Government and industry-sponsored efforts to handle *tuji* in automated processing environments have been dogged by many problems, not least of which has been the lack of uniformity among *tuji*, even within species.

Even more so than the poultry industry in general, chicken farmers and processors must become efficient producers within a short span of 5 years, or accept obsolescence in the face of foreign competition. The government, directly and through industry associations, is supporting activities to advance industry consolidation / cooperation, product development, technical improvement, and consumer marketing efforts. The largest farm now has a capacity of 210,000 head.

Industry experts note that the relatively-small scale and protected nature of Taiwan's poultry rearing industry has saddled local producers with a cost structure which makes Taiwan broiler meat twice as costly, on a ready-to-cook (RTC) wholesale basis as US meat.

Table 5. Farm Gate Prices for Broilers

Prices in US$ per lb.			
Year	1998	1999	% Change
Jan	0.61	0.77	26.2%
Feb	0.53	0.83	56.6%
Mar	0.61	0.72	18.0%
Apr	0.61	0.76	24.6%
May	0.61	0.75	23.0%
Jun	0.63	0.69	9.5%
Jul	0.77	0.72	-6.5%
Aug	0.77	0.73	-5.2%
Sep	0.82	0.72	-12.2%
Oct	0.66	0.7	6.1%
Nov	0.70	0.68	-2.9%
Dec	0.70	0.68	-2.9%

Table 6. Chicken Meat Production, Supply, and Demand (in 1,000 mt)

	1999	2000	2001
	actual	est.	est.
Calendar Year Begin	01/1999	01/2000	01/2001
Inventory (Reference)	0	0	0
Slaughter (Reference)	0	0	0
Beginning Stocks	0	0	0
Production	615	615	610
Whole, Imports	0	0	0
Parts, Imports	14.1	14	20
Intra EC Imports	0	0	0
Other Imports	0	0	0
TOTAL Imports	14.1	14	20
TOTAL SUPPLY	629.1	629	630
Whole, Exports	0.02	0.02	0
Parts, Exports	1.7	1.5	1
Intra EC Exports	0	0	0
Other Exports	0	0	0
TOTAL Exports	1.72	1.52	1
Human Consumption	627	627	629
Other Use, Losses	0.38	0.48	0
Total Dom. Consumption	627.38	627.48	629
TOTAL Use	629.1	629	630
Ending Stocks	0	0	0
TOTAL DISTRIBUTION	629.1	629	630
Calendar Yr. Imp. from U.S.	0	0	0

Consumption

The last decade has witnessed steady growth in market demand for US-style broiler meat. In the home, breast and leg meat are heavily used in stir fry dishes. Nearly all fast food chain restaurants, international and local, offer batter fried chicken breasts & drumsticks and processed chicken burgers. Spicy chicken wings, served with Western-style sauces, are staple menu fare at mid-range Western chain restaurants such as TGI Fridays & Dan Ryan's and are offered by nearly all pizza franchises as a popular side dish. Turkey wings, smoked and spiced locally to Chinese tastes, are hot sellers at grocery stores and hypermarkets. The flame-cooked chicken leg quarter with rice & veggies is (along with the pork chop) one of the two most popular lunch box entrees in Taiwan - accounting for better than 30% of all lunch box sales.

Tuji, with distinctive meat textures and flavors, is principally used by Taiwan consumers to prepare traditional Chinese dishes. Typically the bones and skin, as well as the meat, are used.

Offal is a traditional part of the Chinese / Taiwanese diet and consumers do not understand, much less share, the qualms many Americans have about consuming such dishes as fried kidneys with beer, marinated chicken foot, or congealed duck blood with soup or noodles. Virtually none of the chicken escapes human consumption in Taiwan, including chicken tails - a popular item for street vendors and local fast food chains served up fried by the half dozen on a bamboo skewer. With domestic prices for offal significantly higher than in other markets, attractive sales opportunities for US firms exist once this protected market is opened to competition.

Trade Policy

With the exception of canned chicken (HS 1602.32.00.21-7), imports of chicken and chicken products were banned prior to June 1998, at which time an annual 10,000 mt import quota was approved exclusively for US chicken meat. One year later, Taiwan opened unilaterally a second quota of 9,163 mt for chicken meat shipped from any WTO member state meeting Taiwan's phytosanitary requirements. Up until Taiwan's WTO entry, all incoming chicken meat will be assessed at a tariff rate of 40%.

Once a member of the WTO, Taiwan will consolidate the two quotas into a single 19,613 mt quota open to WTO members meeting Taiwan phytosanitary rules. The in-quota tariff for chicken meat will drop to 25% upon accession and fall further to a final 20% by 2004 - after which Taiwan will end quota restrictions and apply a flat tariff rate of 20% to all imported chicken meat.

Taiwan requires that chicken meat and products may enter Taiwan only from countries certified free of Highly Pathenogenic Avian Influenza (HPAI) and Newcastle Disease (ND). Currently, Taiwan has certified the United States, Canada, Australia, New Zealand, and Sweden as free of these two diseases. Denmark is reportedly currently in the advanced stages of negotiations with Taiwan for certification.

Imports

During 1999, Taiwan importers fully utilized the 10,000 mt quota for US-sourced chicken meat and used less than ½ of the 9,613 mt (WTO-wide) quota.

Table 7. Import Trade Matrix: Taiwan's Chicken Imports

Import Trade Matrix		
Country: Taiwan		Units: 1,000 mt
Commodity: Broiler Meat		
Time period: 1999		
Imports during	1999	2000
U.S.	11.86	12
Others		
Canada	2.25	1.5
Australia	0	0.5
Total for Others	2.25	2
Others not listed	0	0
Grand Total	14.11	14

The allocation process for the WTO member quota of 9,613 mt awarded import rights for better than 1/3 of that total volume to individuals and companies predisposed to protecting local producers from import competition. As a result, only 4,500 of this second quota was used in 1999. Year 2000 chicken meat imports are likely to mirror 1999 figures due to similar quota allocation practices. As in 1998, fresh/frozen chicken meat imports were nearly exclusively chicken leg quarters. Should Taiwan not gain WTO admission during 2000, the potential exists for the island to revoke the WTO-wide quota for the 2001 import year.

Exports

Table 8. Export Trade Matrix: Taiwan's Chicken Exports

Export Trade Matrix		
Country: Taiwan		units: 1,000 mt
Commodity: Broiler Meat		
Time period: 1999		
Exports during	1999	2000
U.S.	0	0
Others		
Hong Kong	1	1
Total for Others	1	0.8
Others not listed	0.7	0.7
Grand Total	1.7	1.5

Marketing

As with most food products raised in Taiwan, there is a strong undercurrent of concern regarding the quality of local chicken among consumers. With expanding quota volumes and the eventual lifting of volume restrictions, US suppliers may benefit significantly by conducting promotion work which underscores the healthful conditions under which US chickens are reared, the emphasis on production and processing quality control at US facilities, and trust in US brand or country-of-origin labels.

In recent years, the CoA established a quality certification logo for *tuji* to heighten its quality image and encourage increased consumption. The "T-U-G" label certifies that chicken was processed in a facility using modern, standardized processing techniques. The myriad obstacles to processing standardization in the *tuji* segment has held the volume of such to between 8% and 10% of *tuji* birds processed. Most *tuji* sold in supermarkets now bear this "T-U-G" logo. The largest retail outlet for *tuji*, the traditional market, is barred from participating in the "T-U-G" system as birds are slaughtered at time of purchase.

> *A Note About Tuji*: Chinese consumers view native / crossbred chickens (*tuji*) as a meat product "similar to, but distinct from" broiler chickens. *Tuji* is used in many very traditional Chinese dishes (examples include sesame oil chicken, chicken soup [where meat, skin, and bones are simmered together with traditional herbs], and chicken cold plate) for which broiler meat is not an acceptable substitute. Similarly, tougher meat and lack of sizing standards make *tuji* unfit for most broiler applications.
>
> Therefore, while production and marketing trends for *tuji* should be of interest to US broiler exporters, particularly from the context of how many broiler producers are heeding government calls to switch to *tuji* production, these two segments of the chicken meat market operate with significant independence from each other.

TURKEY

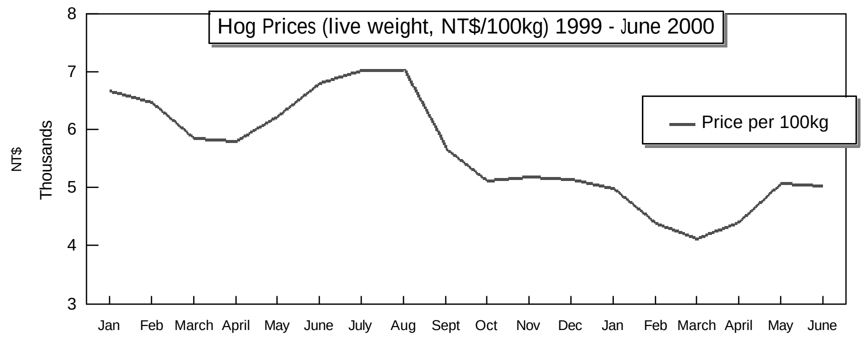
Production

Taiwan statistics show that domestic turkey production grew 8.10% during 1999 to around 2,200 metric tons, most probably a positive reflection of rising pork prices through the first half of 1999 and the efforts of authorities to move poultry farms into non-broiler production. Falling pork prices during the latter half of this past year may reverse 1999 turkey production gains during 2000.

Consumption

In general, turkeys are marketed by hotels and restaurants as ready-to-eat products. Little volume is moved through grocery channels either as meat cuts or processed meat products. The major grocery and hypermarket chains typically offer a small quantity of frozen whole turkeys during November and December. The small installed base of full-sized ovens in homes and general unfamiliarity with how to cook successfully whole birds muzzle potential for growth in home-cooked turkey meals. Whole turkeys are, however, increasingly available (for eat-in and take-out) at upscale hotels and Western restaurants during Thanksgiving and Christmas holidays. Turkey wings, due to their low cost and attractive size (versus chicken wings) are stewed in Chinese spices and sold by street vendors, local restaurants, and in hypermarkets. A formerly shredded-chicken flavored dish was updated during the mid-1990s using turkey breast meat and is now marketed around the island as Chiayi Turkey Cooked Rice through small-scale specialty restaurants.

Domestic turkeys are sold fresh or chilled, while imported turkeys are sold frozen. Local consumer preference for the texture and flavor of fresh (vs. frozen) turkey has channeled local turkey production primarily into the Chiayi Turkey Cooked Rice and other ready-cooked meal markets. As mentioned previously, turkey thigh meat is accepted by manufacturers as a pork substitute / filler in processed meat products. The trigger hog price for substituting turkey thigh meat for pork is reportedly NT$5,000 / 100 kg live weight. Given the fall in farm gate prices for pork from their peak in mid-1999, demand for turkey thigh meat as a substitute can be expected to be soft through the remainder of 2000. Average live weight pork prices for recent months are shown in the chart to the right.



Trade

As with chicken meat, turkey imports into Taiwan must arrive from countries certified by Taiwan authorities as free of both ND and HPAI. As noted elsewhere, the countries with such certification include the US, Canada, Australia, New Zealand, and Sweden. The United States was the only registered exporter of turkeys to Taiwan during 1999.

Table 9. Annual Turkey Imports from 1996 through March 2000

Year	Product	metric tons	US$ value
1996	Whole Turkey	264	$ 474,000
	Turkey Cuts	6,130	$ 9,088,000
	Total	**6,394**	**$ 9,562,000**
1997	Whole Turkey	216	$ 373,000
	Turkey Cuts	5,866	$ 8,093,000
	Total	**6,082**	**$ 8,466,000**
1998	Whole Turkey	241	$ 413,000
	Turkey Cuts	1,797	$ 1,976,000
	Total	**2,038**	**$ 2,389,000**
1999	Whole Turkey	348	$ 595,200
	Turkey Cuts	18,738	$ 21,256,500
	Total	19,086	$ 21,851,700
2000 (1st Qtr.)	Whole Turkey	*21*	*$ 34,000*
	Turkey Cuts	*1,217*	*$ 1,223,000*
	Total	***1,238***	***$ 1,257,000***

Table 10. Production, Supply, and Demand Table for Turkey Meat (in 1,000 mt)

	1999	2000	2001
	New	New	New
Calendar Year Begin	01/1999	01/2000	01/2001
Inventory (Reference)	0	0	0
Slaughter (Reference)	0	0	0
Beginning Stocks	0	0	0
Production	2.2	2	2.3
Whole, Imports	0.3	0.5	0.5
Parts, Imports	18.7	10	7
Intra EC Imports	0	0	0
Other Imports	0	0	0
TOTAL Imports	19	10.5	7.5
TOTAL SUPPLY	21.2	12.5	9.8
Whole, Exports	0	0	0
Parts, Exports	0	0	0
Intra EC Exports	0	0	0
Other Exports	0	0	0
TOTAL Exports	0	0	0
Human Consumption	21.2	12.5	9.8

Other Use, Losses	0	0	0
Total Dom. Consumption	21.2	12.5	9.8
TOTAL Use	21.2	12.5	9.8
Ending Stocks	0	0	0
TOTAL DISTRIBUTION	21.2	12.5	9.8
Calendar Yr. Imp. from U.S.	19	10	7

Tables 11 & 12. Imports & Exports of Turkey Meat (in 1,000 metric tons)

Imports		
Imports during	1999 actual	2000 est.
U.S.	19	10
Others		
Total for Others	0	0
Others not listed		
Grand Total	19	10

Exports		
Imports during	1999 actual	2000 est.
U.S.	0	0
Others	0	0
Total for Others	0	0
Others not listed	0	0
Grand Total	0	0

Marketing

Efforts to increase turkey meat sales at the retail level continue to be dogged by consumer lack of understanding of meat characteristics / qualities and poor product availability in retail outlets (grocery stores, hypermarkets, traditional markets).

Turkey lacks a foundation in the Chinese universe of ingredients and thus does not find a ready home in dishes such as stir fries and soups. The Chinese chef, whether in the home or in a restaurant, is typically not innovative and would be unwilling on his / her own to substitute turkey meat in, for example, a stir fry that calls for chicken. Appropriate consumer education and promotion should help pique interest and salve concerns regarding substituting turkey for other poultry meats in popular dishes. The market for turkey in Western dishes, while growing, represents a small niche market comprised primarily of 4- and 5-star hotels & a few restaurants in Taipei, Taichung, and Kaohsiung.

Table 13. Farm Gate Prices for Turkey (equivalent US$ per pound)

US$ per pound			
Year	1998	1999	% Change
Jan	0.60	0.60	0.0%
Feb	0.43	0.56	30.2%
Mar	0.42	0.6	42.9%
Apr	0.44	0.63	43.2%
May	0.48	0.65	35.4%
Jun	0.55	0.65	18.2%
Jul	0.43	0.63	46.5%
Aug	0.44	0.68	54.5%
Sep	0.49	0.6	22.4%
Oct	0.55	0.6	9.1%
Nov	0.55	0.58	5.5%
Dec	0.56	0.63	12.5%

DUCK

Three-thousand years of duck rearing history in China bequeath to Taiwanese a well-founded fondness for duck meat and eggs. The distinctive dishes in which duck products are served give duck meat and eggs a market categorization distinct from other poultry meats & products.

In terms of domestic production, ducks raised in Taiwan for meat production are principally of the variety *tufanya* (80%), with the remainder divided roughly evenly between *fanya* and *beijingya* (Peking duck) breeds. Layers are almost exclusively of the *chensecai* variety.

In recent history, the duck farming and processing industry in Taiwan was heavily export-oriented, with exports of meat, eggs, and feathers targeting consumers in Japan and Southeast Asia. The entry of China as a low cost duck meat / products exporter has pared export markets for Taiwan ducks significantly. The entry of both China and Taiwan into the WTO is expected to cut further into the margins of local producers margins and, eventually, entice international sales into this market. Industry experts anticipate that high-quality US producers will pose the most effective challenge to domestic ducks. China and Thailand offer strong price competition - although current phytosanitary restrictions rule out importation from either.

In 1999, the average farm gate price was NT$28.82 / kg. for live ducks, equivalent to NT$41.5 per kg. RTC (ready-to-cook).

The current tariff for duck meat (whole) is 35%. This tariff rate will remain unchanged after Taiwan gains entry into the WTO. Only the previously mentioned countries recognized by Taiwan as free from ND and HPAI are permitted to export duck meat to Taiwan. Statistics indicate that no duck meat was imported into Taiwan during 1999.

GEESE

As late as the 1980s, geese were generally raised as a sideline to a main farm business, such as fish or vegetable farming. As such, the industry remains in the early stages of development as a production-scale industry. Taiwan breeds are largely descended from varieties including White Roman & Embden (imported initially from Denmark during the 1970s and 80s) and Tulouse, African, and White Chinese (imported during the 1980s from the US).

During 1999, Taiwan produced 30,000 mt of goose meat - around 4% of total poultry meat production. Most goose meat is sold as a ready-to-eat product in small local restaurants. Although goose meat imports are permitted, no imports have occurred in recent years. Similarly, Taiwan did not export any goose meat during 1999.

The average production scale is 5,000 to 6,000 birds per farm. Production during 2000 and beyond is expected to maintain the 1999 level of around 32,000 mt. Maturation takes 100 days and average market weight is 4 to 5 kg. During 1999, the average farm gate price was NT$52.41 kg, equivalent to around NT$74 kg RTC.

The current import tariff for goose meat is 40 percent. Upon WTO accession, tariff rates will be lowered to 28% for chilled goose meat (whole), 30% for chilled goose meat (cut into pieces), and 30% for frozen goose meat (whole or pieces). Under current agreements, all three tariff rates will drop to a final rate of 25% in January 2002.

EGGS

Production

Poultry eggs include hen and duck eggs. Egg production was 7.8 billion pcs. in 1999 (93% hen eggs), up just under 2% from 1998. Government-sponsored cooperation amongst industry producers has improved information flows amongst producers, giving producers access to production numbers and prices on a daily basis to help adjust production to maintain market price levels. Recent industry price data may be accessed at Website: www.poultry.gov.tw (Chinese-enabled browser required). During the first half of 2000, cooperation did not stave off overproduction and, at the time of writing, farm gate prices for chicken eggs hit an historical low of NT$15 per kg. The government has reportedly initiated a quantity purchase program with a target to raise prices to NT$20 per kg.

Table 14. Production, Supply, and Demand Table: Chicken Eggs (in million pcs.)

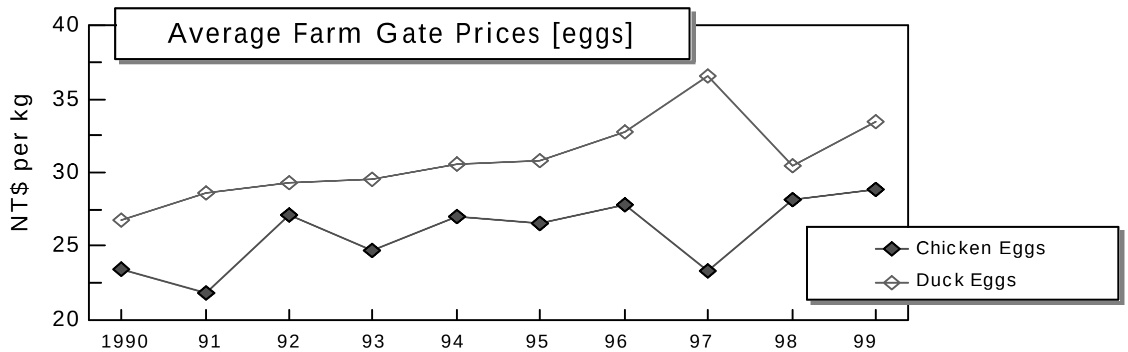
	1999	2000	2001
Calendar Year Begin	01/1999	01/2000	01/2001
Layers	35	39	36
Beginning Stocks	1850	2000	1500
Production	7250	7700	7700
Hatch Eggs, Imports	0.1	0.1	0.1
Shell Eggs, Imports	0.5	0	0
Other Imports	0.7	0	0.5
Intra EC Imports	0.6	0	0
TOTAL Imports	1.3	0.1	0.6
TOTAL SUPPLY	9101.3	9700.1	9200.6
Hatch Eggs, Exports	0.8	0.8	0.8
Shell Eggs, Exports	3.5	3	3
Other Exports	0.7	1	1
Intra EC Exports	0	0	0
TOTAL Exports	5	4.8	4.8
Hatch Eggs, Consumption	0	0	0
Shell Eggs, Human	6381.3	6995.3	6995.8
Shell Eggs, OT.Use/Loss	215	200	200
Other Dom. Consumption	500	1000	500
Total Dom. Consumption	7096.3	8195.3	7695.8
TOTAL Use	7101.3	8200.1	7700.6
Ending Stocks	2000	1500	1500
TOTAL DISTRIBUTION	9101.3	9700.1	9200.6
Calendar Yr. Imp. from U.S.	0	0	0

Industry experts note that break-even for egg production farms in Taiwan is around NT$21 per kg.

Nearly the entirety of duck egg production is consumed as salty and alkalized (1,000 year-old) eggs. As both are traditional foods, demand from year to year is largely stable - at around 540 million pieces. Production during 1999 fell to around 500 million pieces, largely in response to the drop-off in consumer demand following the September 1999 earthquake.

Duck layers number approximately 3 million, while hen layers number around 2.7 million. Total production estimates for 2000 and 2001 are 10.5 and 9.9 billion eggs, respectively.

Price



Chicken egg production costs are estimated at NT$20 per kg, with the industry considered profitable when farm gate prices are higher than NT$26 per kg. Over 1999, the average farm gate price was NT$28.2 per kg for chicken eggs and NT$33.4 per kg for duck eggs.

Table 15. Farm Gate Prices for Chicken Eggs

NT$ per kg.			
Year	1998	1999	% Change
Jan	24.28	37.26	53.5%
Feb	21.71	38.03	75.2%
Mar	20.98	33.24	58.4%
Apr	23.37	32.96	41.0%
May	21.69	30.24	39.4%
Jun	23.19	24.77	6.8%
Jul	28.16	25.84	-8.2%
Aug	32.62	27.2	-16.6%
Sep	35.24	23.45	-33.5%
Oct	29.75	25.7	-13.6%
Nov	38.13	22.71	-40.4%
Dec	38.15	24.46	-35.9%

Consumption

As noted in the introduction, 1999 per capita annual egg consumption was around 275 eggs. Most chicken eggs were destined for table use and sold through traditional or grocery stores, prepared in restaurants, or retailed as stewed or tea-marinated eggs. Approximately 5% of all domestic chicken eggs are processed into liquid and powdered eggs. Currently Taiwan has no regulation requiring pasteurization of liquid eggs and so production is scattered amongst small-scale producers recovering the whites and yolks of broken whole eggs. Very little powdered egg product has been produced, although a proposed government & industry price support program discussed during mid-2000 could significantly increase local powdered egg production in the short term. There is little trade, either local or international in liquid or powdered eggs as most downstream product manufacturers and consumers request whole eggs.

Egg Products: Nearly all duck eggs are consumed as salty and 1,000 year-old eggs. The small volume of out-of-shell chicken egg products consumed include liquid eggs and powdered eggs.

Marketing

Four of every 5 eggs retailed to consumers are sold by farms to traditional markets and retail outlets in 12 kg trays. Consumers purchase by weight or by number based on individual retailer practice. Traditional market vendors typically sell by weight, while local convenience store chains and some local grocers sell by number. The remaining retail eggs are packaged in 10-piece cartons and distributed principally through supermarket and hypermarket chains.

Creative R&D and marketing has led to the introduction of vitamin and mineral fortified eggs which sell at a fair premium to mainstream in-shell eggs (refer to Appendix).

APPENDIX

Representative Retail Prices for Poultry & Egg Products [3]
(all items chicken, unless otherwise indicated)

- July 2000 -

Meat (grocer, chilled, retail)

1	*Tuji* local variety whole, with skin, with bones	NT$140	per	pc.
2	*Wuguji* local variety whole, with skin, with bones	NT$175	per	pc.
3	*Tuji* local variety whole, in pieces, with skin, with bones	NT$76	per	pc.
4	*Wuguji* local variety whole, in pieces, with skin, with bones	NT$89	per	pc.
5	Range-raised (*fangshanji*) local variety whole, with skin, with bones	NT$249	per	pc.
6	Duck whole, with skin, with bones	NT$229	per	pc.
7	Large drumsticks	NT$17.5	per	100g
8	fryer drumsticks (small)	NT$45	per	6 pc.
9	½ breast (no skin, with bones)	NT$9.9	per	100g
10	Whole breast (with skin and bones)	NT$11.9	per	100g
11	Wings (2-section)	NT$16.9	per	100g
12	Wings (3-section)	NT$16.5	per	100g
13	Breast meat (boneless)	NT$26	per	100g
14	Thigh / leg meat (boneless)	NT$21	per	100g
15	Cubed meat	NT$20.9	per	100g
16	Feet	NT$8.9	per	100g
17	Heart	NT$27	per	100g
18	Liver	NT$8.9	per	100g
19	Kidney	NT$21.9	per	100g

[3] Note exchange rate is approximately US$1 : NT$32

Eggs (grocer, fresh, retail)

1	Fresh White	NT$28	per	10 pc.
2	Fresh Brown	NT$35	per	10 pc.
3	Fresh White, "organic"	NT$49	per	10 pc.
4	Fresh Brown, "organic"	NT$49	per	10 pc.
5	Fresh White, "beta-carotene fortified"	NT$41	per	8 pc.
6	Fresh White, "DHA-fortified"	NT$47	per	6 pc.
7	*Pidan* ("1,000 year-old eggs"), *Tuji*	NT$45	per	6 pc.
8	*Pidan* ("1,000 year-old eggs"), duck	NT$44 ~ 95	per	6 pc.
9	*Pidan* ("1,000 year-old eggs"), duck, "organic"	NT$75	per	4 pc.
10	*Xiandan* ("Salty egg"), duck	NT$33	per	4 pc.

Examples of other retail and prepared poultry / egg products

	Item	**Location**	**Retail Price**
1	Chicken nuggets (brand-name), frozen	Grocery store	NT$189 / 1000g.
2	Chicken nuggets (store brand), frozen	Grocery store	NT$155 / 900g.
3	Ready to fry drumsticks (brand-name), frozen	Grocery store	NT$179 / 600g.
4	Ready to fry chicken parts (brand-name), frozen	Grocery store	NT$186 / 700g.
5	Chicken "floss" (brand-name), canned	Grocery store	NT$175 / 165g.
6	Chicken "floss" (brand-name), canned	Grocery store	NT$215 / 300g.
7	Chicken sausages (Chinese style, meat content is chicken thigh meat only), chilled fresh	Grocery store	NT$99 / 225g.
8	Chicken sandwich (breast meat), prepared	International fast food chain	NT$65 / pc.
9	Chicken drumstick (deep fried), prepared	International fast food chain	NT$49 / pc.
10	Chicken drumstick (deep fried), prepared	Local fast food chain	NT$18 / pc.
11	Chicken neck (200g., deep fried), prepared	Local fast food chain	NT$56 / pc.
12	Tea-marinated egg (hard boiled, white egg)	convenience store	NT$7.0 / pc.