

Federal Grain Inspection Service



*Promoting and protecting the integrity
of the domestic and global marketing of
U.S. grain for the benefit of American agriculture.*

- *Harnessing Technology*
- *Promoting Standardization*
- *Providing Official Inspection
and Weighing Services*
- *Protecting Integrity*

FY 2000 Highlights

- Biotechnology Services** In FY 2000, GIPSA began building and staffing a biotechnology reference facility to provide standardization for the sampling, reference methodologies, and rapid tests for biotech grains. GIPSA also announced on May 4, 2000, its intent to accredit independent laboratories using Polymerase Chain Reaction (PCR) testing to determine the presence of modified DNA in grain and to certify the performance of rapid tests. GIPSA will begin providing these services in FY 2001.
- Biotechnology ANPR** As part of the Administration's initiative to improve consumer access to information on biotechnology, GIPSA, in conjunction with the Agricultural Marketing Service, prepared an advance notice of proposed rulemaking (ANPR) seeking public comment on USDA's role in facilitating the marketing of grains, oilseeds, fruits, vegetables, and nuts in today's marketplace with biotech and non-biotech crops. GIPSA will publish the ANPR during FY 2001.
- Biotechnology Statements** In FY 2000, GIPSA implemented procedures to provide sellers a special statement indicating that a specific grain, oilseed, or graded commodity is not biotech, provided such product was not in commercial production according to the Animal and Plant Health Inspection Service (APHIS) regulatory program.
- Biotech Detection Workshop** In February 2000, GIPSA and the Analytical Environmental Immunochemical Consortium co-sponsored a biotechnology-detection methods validation workshop in Kansas City. A worldwide group of technical experts discussed the validation and application of technologies used in the detection of grain containing biotechnology-derived products. Approximately 70 people attended the workshop, including representatives from Canada and the Joint Research Centre (Europe). The workshop was a highly successful communication forum on this emerging issue.
- Foreign Complaints** The number of foreign complaints on the quality or quantity of U.S. grain exports decreased by 35 percent in FY 2000. GIPSA received 13 quality and 0 quantity complaints from importers on grains inspected under the U.S. Grain Standards Act, involving 355,853 metric tons, or about 0.3 percent by weight, of the total amount of grain exported during the year. This compares to 20 quality and 2 quantity complaints received in FY 1999, representing about 1.4 percent of grain exports by weight.

Facilitating Trade with Mexico

GIPSA worked with APPAMEX, a Mexican grain importers association, to address Mexican importers' grain quality concerns. GIPSA inspectors conducted two sets of seminars in Mexico to explain U.S. sampling and inspection method. In FY 2001, GIPSA will hold additional seminars and conduct two monitoring experiments. In conjunction with APPAMEX, GIPSA inspectors will monitor the quality of two grain shipments (one oceangoing, one sent via rail) from the United States to the final end-user in Mexico. Finally, GIPSA, is working with officials of Mexico's Ministry of Trade and Ministry of Agriculture to help develop a national inspection system in Mexico patterned after GIPSA's.

Philippine Weight Review of

GIPSA responded to weight complaints from the Philippine Association

Flour Millers (PAFMIL) during FY 2000. Following the review of and modification to the PAFMIL mills, GIPSA initiated a cargo monitoring program. In September 2000, PAFMIL representatives monitored the loading of a U.S. wheat shipment destined for the Philippines. In FY 2001, GIPSA will monitor the vessel's unloading in the Philippines. The project is designed to improve the accuracy of and confidence in weights of U.S. wheat shipments to the Philippines. In September 1999, GIPSA assembled a U.S. team of government and industry representatives to review the grain handling, scales, and weighing systems at each of PAFMIL's four flour mills. Based on the U.S. team's recommendations, the PAFMIL flour mills implemented various improvements to their weighing and handling systems.

TCK Smut Certification

GIPSA implemented TCK smut certification procedures to facilitate the marketing of U.S. wheat to China and India. These countries are concerned about the presence of TCK smut in imported wheat shipments. Implementing these procedures facilitates the export of wheat to these countries. GIPSA's procedures helped enable the United States to reach a trade agreement with China.

Buckwheat Inspection Procedures

GIPSA implemented inspection procedures for buckwheat and whole buckwheat groats to facilitate a Farm Service Agency (FSA) purchase of buckwheat destined for Russia. The combined shipment was for 2,340 metric tons and was a first-time FSA purchase for these two products. This procedure could facilitate other shipments in the future.

Automated Export Grain Inspection Data System

GIPSA implemented an automated inspection plan for export grain shipments at 25 export facilities in Louisiana, Texas, Oregon, and Washington. These port locations account for approximately 96 million tons, or 86 percent of all U.S. export grain. The automated plan provides direct data entry from inspectors, performs all necessary calculations, shares inspection results electronically with the customer, and prepares the final certification of grain quality. The system also provides extensive checks to reduce errors, which can be costly to the buyer or seller of grain exports. Full implementation (including Federal and State laboratories) is scheduled for the spring of 2001.

**Modified Inspection
Procedure**
and

GIPSA established or modified inspection procedures for confection sunflower seeds and hull-less barley to better reflect market conditions

accommodate the USDA farm programs for deficiency payments and crop insurance.

Harnessing Technology

Automation Initiatives

Automated Grain Weighing and Material Handling Systems. GIPSA continues to work closely with export grain elevators that are automating their scales and material handling systems in accordance with official requirements. Upon approval of their systems and after a 6-month test period, participating elevators can reduce official oversight personnel, which results in considerable cost savings. Seven export elevators' systems have been approved, one elevator is completing its 6-month test, and four elevators have completed installation and are being tested. These automated systems provide superior supervision and greatly improved efficiency.

Grain Inspection Automation at Export Elevators. GIPSA, working with the North American Export Grain Association (NAEGA), has charged a team of automation and grain inspection experts with developing an automated grain inspection system for use at export elevators. When completed and approved, the system will provide export elevators with constantly updated grain inspection information five times faster than present manual methods. The automated system has the potential to reduce costs to the industry and enhance GIPSA's efficiency.

A prototype system is being installed at an export elevator in Destrehan, Louisiana.

E-Government. Over 81 percent of the private and State agencies authorized by GIPSA to provide official grain inspection and weighing services adopted GIPSA's standard electronic certification output format, an essential step toward providing all customers electronic service results.

Laboratory Information Management System. In FY 2000, GIPSA modified the Laboratory Information Management System (LIMS) to perform analytical testing data management functions for all commodities. In FY 2000, LIMS was used to collect all reference and analytical testing data in support of GIPSA calibration activities and the commodities testing program.

Digital Imaging

Rice Inspection. Digital imaging shows great potential for improving the accuracy, consistency, and objectivity of grain inspection and grading. Digital imaging is a process of recording images, e.g., of grain, in electronic format for rapid review, analysis, and transfer to other computers. In FY 2000, GIPSA continued and expanded a pilot program with official inspection laboratories in Arkansas and California to use the method to certify the percentage of broken kernels in milled rice. Work will continue in FY 2001, with the intent of approving digital imaging for general use in the official inspection and weighing system.

Wheat Inspection. GIPSA collaborated with the USDA Agricultural Research Service (ARS) to develop preliminary calibrations for measuring the vitreousness of Hard Red Spring and Durum wheat using digital imaging. Vitreousness, the factor that determines subclasses within Durum and Hard Red Spring wheat classes, is determined visually by inspectors and is a subjective interpretation. Digital imaging may improve consistency in measuring vitreousness. A field test for measuring vitreousness in Durum wheat also is planned.

Finally, GIPSA will explore opportunities for applying remote digital imaging to enhance visual grading services. Remote digital imaging could help inspectors better interpret and grade difficult or unusual grain characteristics, facilitate training for inspectors, and convey to customers visual information on grain condition.

Mycotoxins Methods Development and Test Kit Approvals
reviewed

In FY 2000, GIPSA developed and validated a fumonisin reference method. This enabled GIPSA to initiate evaluation of fumonisin test kits for use in the official inspection system. During the year, GIPSA

and rejected two DON test kits, reviewed and approved one DON test kit for use in the official inspection system, and initiated a review of one aflatoxin test kit and three fumonisin test kits. In FY 2001, GIPSA plans to develop and validate a method for zearalenone and request submission of zearalenone test kits to be approved for the official inspection system.

Pesticide Residue Methods Development and Testing

GIPSA continued to participate in the Pesticide Data Program, a cooperative effort of the USDA, U.S. Environmental Protection Agency, and 10 participating States to monitor pesticide residue levels in fruits, vegetables, grain, and milk. GIPSA tests all grain and grain-related products. GIPSA also helps develop new methods of analysis. For example, in FY 2000, GIPSA developed and validated a method to analyze peanut butter samples for pesticide residue, and tested 560 peanut butter samples. In FY 2001, GIPSA will develop and validate methods to analyze rice and barley for pesticide residues, and will analyze approximately 40 peanut butter samples, 600 rice samples, and 600 barley samples.

Wheat Protein Quality

Wheat millers and bakers measure the quality of wheat protein to predict the end-use functionality of the wheat. Unfortunately, current methodologies for measuring protein quality are time-consuming and not standardized. In FY 2000, GIPSA collaborated with researchers from academia and ARS to define wheat protein quality and to develop practical, rapid methods for assessing wheat protein quality in marketing channels. Development of a rapid wheat-protein quality test will facilitate a more direct, value-based pricing structure.

Promoting Standardization

Biotechnology

In FY 2000, GIPSA began building and staffing a Biotechnology Reference Facility to provide standardization for the sampling and detection of biotech grains. GIPSA also announced its intent to accredit independent laboratories using Polymerase Chain Reaction (PCR) testing to determine the presence of modified DNA in grain and to certify the performance of commercially available rapid tests used to detect biotech grains. These services are designed to help standardize the testing of bio-engineered grains throughout the commercial market and help ensure that all entities involved in the marketing of U.S. grain, from producer to end user, can obtain relevant information.

In FY 2001, GIPSA will open the Biotechnology Reference Facility and implement programs to accredit laboratories and certify performance of rapid tests for the presence of biotechnology grains.

ISO 9002 Certification

The International Standards Organization (ISO) represents the national standards institutes and organizations of 97 countries worldwide, including the American National Standards Institute (ANSI). The ISO standards have been endorsed by the American Society of Quality, the European Standards Institute, and the Japanese Industrial Standards Committee and are becoming the *de facto* standard across industries throughout the world. In FY 1998, GIPSA successfully met ISO 9002 standards and received certification for its moisture and protein reference laboratories. In FY 2001, GIPSA will seek ISO 9002 certification of its oil extraction reference, mycotoxins reference, and pesticide laboratories.

New Official Moisture Meter

In FY 2000, GIPSA continued implementing its new official moisture meter by developing and executing official calibrations for flaxseed, lentils, safflower seed, Short Grain Rough rice, Smooth Dry peas, confectionery-type sunflower seed, and buckwheat groats. Also, GIPSA developed improved calibrations for corn, oil-type sunflower seed, Soft White wheat, and oats. In FY 2001, GIPSA will continue to monitor performance of existing official moisture calibrations and develop calibrations for additional grains for the new official moisture meter.

NIRT Standardization

In FY 2000, GIPSA continued to cooperate with groups from Canada, Australia, and several European countries to develop and test a “global” near-infrared transmission (NIRT) calibration for wheat and barley protein testing. The calibration, based on tests of nearly 40,000 samples of wheat and barley, uses artificial neural network technology to achieve excellent accuracy for very diverse grain types. In FY 2001, GIPSA will assess the market impact of implementing the new calibration.

In FY 2000, GIPSA implemented improvements in standardization for official NIRT instruments by issuing new standard reference samples, standard slope values, and baseline values for corn oil and protein, and by issuing new standard reference samples and baseline values for soybean oil and protein.

Pulsed NMR for Sunflower Oil Measurements

In FY 2000, GIPSA developed new sealed sunflower seed oil standards to improve the accuracy of official sunflower seed oil measurements using pulsed nuclear magnetic resonance (NMR) technology. GIPSA also conducted a field test to assess the feasibility of a new method to avoid drying sunflower seed samples before testing with the pulsed-NMR equipment. The initial field tests were inconclusive; research is continuing.

Standardizing Commercial Grain Inspection Equipment

In FY 2000, GIPSA continued to participate in a cooperative effort among GIPSA, the National Institute for Standards and Technology (NIST), and the National Conference on Weights and Measures (NCWM) to standardize commercial grain inspection equipment. GIPSA serves as the sole evaluation laboratory for grain inspection equipment under NCWM's National Type Evaluation Program (NTEP). The data GIPSA collected during fiscal years 1995, 1996, 1997, 1998, and 1999 were used as the basis for numerous improvements in calibrations for commercial grain moisture meters. GIPSA completed testing and recommended NTEP certification of engineering enhancements to extend the allowed operating temperature range for one commercial moisture meter model, and conducted evaluation testing and recommended certification for another new commercial moisture meter model.

In FY 2001, GIPSA plans to offer NTEP evaluation services for near-infrared spectroscopy instruments for constituents other than moisture. GIPSA also will continue to provide technical support to NCWM as specifications and tolerances for commercial test weight apparatuses are developed.

Standardizing Commercial Grain Inspection Testing

At the request of the National Sunflower Association, GIPSA is providing the sunflower industry with NuSun oil sample standards. NuSun is the name that has been given to the mid-range oleic (mono-unsaturated) sunflower oil now being produced for the domestic vegetable oil market. Oil from NuSun varieties is lower in saturated fat content and more acceptable than high-linoleic oil for deep-fat frying operations.

Traditionally, sunflowers grown for oil have been high-linoleic (polyunsaturated) varieties. Eventually, the majority of oil sunflower acreage is expected to shift from high-linoleic to mid-oleic varieties. GIPSA's standard samples will be used to segregate NuSun and traditional linoleic sunflowers at the first point of sale. The crushing industry pays a premium for NuSun sunflowers over traditional linoleic sunflowers, although visually they are indistinguishable.

Visual Reference Material
visual

In FY 2000, GIPSA evaluated the feasibility of improving its current reference system (35 mm slides) through the creation of digital color prints using commercially available computer hardware, software, and printer technology. GIPSA found the process to be more efficient, manageable, and affordable in terms of producing accurate colors and consistent reproductions when compared to the film reproduction process. Feedback from potential users, within and outside the official system, has also been favorable. For these reasons, GIPSA is acquiring the necessary equipment to produce the “next generation” visual reference aids and will begin transitioning from the use of photographic slides to digital color prints in FY 2001.

U.S. Grading Standards
the

Oats. GIPSA has prepared a proposal to revise the definition of oats in Official U.S. Standards for Oats to include hull-less oats. This change will benefit the oat industry, and especially the segment involved in hull-less oat production and/or processing. GIPSA plans to publish this proposal in FY 2001.

Sorghum. GIPSA is preparing a proposal to solicit public comment on amending the Official U.S. Standards for Sorghum. Specifically, proposed changes would simplify the sorghum classification scheme, and redefine damage to measure only damaged sorghum and not include other damaged grains, which are considered foreign material. GIPSA plans to complete the proposal in FY 2001.

Wheat. GIPSA is taking several actions regarding the Official U.S. Standards for Wheat. GIPSA also is proposing to amend the basis of analysis and special grade limits for garlic. This change will ensure that the standards better reflect the actual market impact when garlic is present in wheat. GIPSA also is drafting proposed amendments to the standards to include export grade limits for dockage to promote export sales of cleaner wheat to our international customers.

**Briefings with Visiting
Trade and Governmental
Teams**

In cooperation with USDA cooperator organizations like U.S. Wheat Associates and the U.S. Grains Council, GIPSA educates international trade teams and government representatives about the U.S. grain market and national inspection system. International representatives visit GIPSA field offices, onsite laboratories at export grain elevators, and the Agency’s Technical Center in Kansas City, Missouri. At the Technical Center, delegations sometimes receive technical training on analytical testing procedures and grain inspection methods and procedures.

Briefings are tailored to address each group’s interests and concerns. Presentations include explanations of GIPSA’s various services, the Agency’s use of the latest technology to provide grain traders with accurate and reliable inspection and weighing information and, for importers or potential importers new to the U.S. grain market, information on contracting for the quality they desire.

By fostering a better understanding of the U.S. grain marketing system, the official U.S. grain standards, and the national inspection system, these briefings enhance purchasers' confidence in U.S. grain. In FY 2000, GIPSA representatives met with 48 teams from 28 countries, as shown below. These 28 countries accounted for 60.4 percent of the grain exported from the United States in FY 2000.

Summary of Briefings with Visiting Trade and Governmental Teams in Fiscal Year 2000

Algeria	Moldova
Australia	Montenegro
Bulgaria	Nicaragua
China	Nigeria
Costa Rica	Panama
Croatia	Philippines
El Salvador	Romania
Georgia	South Korea
Japan	Sri Lanka
Jordan	Taiwan
Kazakhstan	Tanzania
Kenya	Thailand
Lebanon	Uganda
Mexico	Vietnam

International Outreach assistance

In FY 2000, GIPSA responded to customers' needs for technical overseas. Exporters, importers, and end users of U.S. grains and oilseeds, as well as other USDA agencies, USDA cooperator organizations, and other governments, frequently ask for GIPSA personnel to travel overseas. These activities include representing the Agency at grain marketing and grain grading seminars, meeting with foreign governments and grain industry representatives to resolve grain quality and weight discrepancies, helping other countries develop domestic grain and commodity standards and marketing infrastructures, assisting importers with quality specifications, and training local inspectors in U.S. inspection methods and procedures. This year, GIPSA received 19 requests for technical assistance overseas.

**Summary of Activities
Involving International
Travel in Fiscal Year 2000**

<i>Purpose</i>	<i>Number of Travelers</i>	<i>Country Visited</i>	<i>Dates of Visit</i>
1. To attend a meeting of the National Type Evaluation Technical Committee (NTETC) Weighing Sector.	1	Canada	10/03 - 10/06/99
2. To participate in a rice trade seminar in Turkey at the request of USA Rice Federation (USARF), and to investigate a quality discrepancy in Yemen at the request of the Foreign Agricultural Service (FAS).	1	Turkey Yemen	10/16 - 10/31/99
3. To attend the North American Export Grain Association (NAEGA)/ APPAMEX Annual Trade Forum.	1	Mexico	11/04 - 11/07/99
4. To participate in crop quality seminars at the request of U.S. Wheat Associates (USWA).	1	Morocco	11/07 - 11/13/99
5. To upgrade and install computer equipment in the GIPSA Montreal Field Office.	1	Canada	11/08 - 11/10/99
6. To provide technical advice to Chinese officials on grain standards and inspection procedures, and to meet with Korean importers to discuss concerns regarding recent corn shipments.	2 1	China Korea	12/03 - 12/13/99 12/14 - 12/17/99
7. To assess damage to shipments of 416B wheat flour at the request of FAS.	1	Yemen	12/09 - 12/22/99
8. To sample railcars of U.S. wheat that were being detained by the importer.	1	Mexico	12/12 - 12/15/99
<i>Continued</i>			
	<i>Number of</i>	<i>Country</i>	<i>Dates of</i>

<i>Purpose</i>	<i>Travelers</i>	<i>Visited</i>	<i>Visit</i>
9. To provide technical assistance to the Government of Montenegro to assess the quality of U.S. shipment of corn.	1	Montenegro	1/17 - 1/23/00
10. To conduct a strategic planning mission for the U.S. Agency for International Development.	1	Kenya, Uganda, Tanzania	3/03 - 3/18/00
11. To provide export services on a cargo of U.S. wheat being loaded in Canada.	2	Canada	3/05 - 3/08/00
12. To witness the discharge and assess the damage to a PL-480 Title III bagged rice shipment at the request of the Farm Service Agency.	1	Russia	3/05 - 3/19/00
13. To provide export services on a cargo of U.S. wheat being loaded in Canada.	3	Canada	3/12 - 3/22/00
14. To participate in training Canadian inspectors to grade grain according to U.S. standards.	1	Canada	4/03 - 4/07/00
15. To provide export services on a cargo of U.S. wheat being loaded in Canada.	2	Canada	4/25 - 4/28/00
16. To present a corn and sorghum training seminar at the request of Cargill, Inc.	2	Mexico	4/26 - 4/28/00
17. To attend the SpeedExpo 2000 User Group Conference to receive training in Speedware software.	1	Canada	4/30 - 5/06/00
<i>Continued</i>			

<i>Purpose</i>	<i>Number of Travelers</i>	<i>Country Visited</i>	<i>Dates of Visit</i>
18. To participate in USWA marketing seminars in Turkey and Egypt and to observe the discharge of a shipment of U.S. wheat in Jordan at the request of the Jordanian Government.	1	Turkey Egypt Jordan	5/29 - 6/09/00 6/09 – 6/18/00
19. To participate on a FAS/GIPSA fact-finding team concerning regulatory issues related to agricultural biotechnology.	1	Philippines, Korea Hong Kong, Taiwan	5/31 - 6/14/00
20. To provide export services on a cargo of U.S. wheat being loaded in Canada.	3	Canada	6/12- 6/16/00
21. To participate in the International Grains Council 2000 Conference at the invitation of the Canadian Grain Commission.	2	Canada	6/13 - 6/14/00
22. To conduct a corn grading seminar for Syrian grain inspectors at the request of U.S. Grains Council (USGC).	1	Egypt	6/22 - 6/28/00
23. To participate in a grain marketing conference at the request of USGC.	1	Mexico	6/26 - 6/30/00
24. To sample damaged containers of wheat flour and edible beans, assess the quality, and provide technical assistance at the request of FAS.	1	Netherland s	7/25 - 8/14/00
<i>Continued</i>			

<i>Purpose</i>	<i>Number of Travelers</i>	<i>Country Visited</i>	<i>Dates of Visit</i>
25. To conduct grain grading seminars for Mexican importers, and to discuss grain inspection procedures.	4	Mexico	8/7 - 8/18/00
26. To participate on a FAS/GIPSA fact-finding team concerning regulatory issues related to agricultural biotechnology.	1	Japan, Thailand, Malaysia, Indonesia, Singapore, Australia	9/9- 9/29/00

Providing Official Inspection and Weighing Services

Promoting Efficient Grain Handling

GIPSA implemented three procedural changes to the Cu-Sum Plan to promote more efficient loading at export elevators and elevators loading unit trains. Cu-Sum is a statistical-based inspection plan used for export vessel shipments and multiple-car unit train shipments. The plan was changed to promote more efficient loading and better address the use of shipping bins for unit train inspections. Specifically, changes increase the subplot size from 5 railcars to 10 railcars for unit trains containing 50 or more railcars; better match the number of component samples inspected with the configuration of the loading facility; and require fewer sublots to be inspected.

GIPSA also worked with the wheat industry to develop an identity-preserved program for Western White Wheat (a blend of Soft White and Club wheats). This procedure, when implemented, will provide a consistent quality during loading, promote the efficient use of White Club wheat, and reduce the shipper's risk of elevating unacceptable wheat. GIPSA continues to work with industry to develop this process.

Promoting Exports

India. GIPSA established a certification procedure to facilitate the marketing of U.S. wheat to India. India has a maximum 0.005 percent tolerance for dwarf bunt (TCK smut) in wheat. GIPSA determined a visual assessment for smutted kernels is a practical method to determine compliance with this TCK smut tolerance. GIPSA responded to this export need by implementing Program Notice 99-20, "Certification of TCK to India."

China. In FY 1999, GIPSA implemented procedures to analyze export grain for the presence of TCK smut spores. This action was in response to import demands established by the People's Republic of China, which had restricted wheat exports from the West Coast ports due to concerns about TCK in U.S. wheat. In FY 2000, to further refine the procedure, GIPSA implemented Program Notice 00-7, "Smut Ball Analysis for Wheat Shipments to China," which provided for the analysis of individual sublots for the presence of smut balls to determine subplot acceptance during loading. This action further facilitated U.S. wheat exports to China and strengthened international confidence in the quality of wheat exported from the United States.

Biotechnology Statements. In FY 2000, GIPSA implemented procedures to provide shippers and importers with information about biotechnology-derived grains, oilseeds, and graded commodities. Importers of grains, oilseeds, and graded commodities require statements to identify which grains and graded commodities are not biotechnology-derived to facilitate the movement of their purchases into their destination country.

GIPSA, working with APHIS, responded to these needs by providing a letterhead statement indicating commercial production of specific grains, oilseeds, and graded commodities in the United States are not biotechnology-derived. GIPSA provides this statement if APHIS has not approved any petitions for the release of transgenic varieties of the specific grain, oilseed, or graded commodity for commercial use in the United States.

Supporting USDA Farm Programs and Producer Income

USDA farm programs for deficiency payments and crop insurance typically rely on the U.S. standards to determine eligibility and payment. GIPSA acted on two commodities this year -- confection sunflower seeds and hull-less barley -- to assist farmers in their eligibility requirements.

Confection sunflower seeds were rejected by processors during the 2000 crop year due to a quality condition known as "dark roast." Crop insurance policies did not include dark roast as an eligibility condition and there were no official procedures for its determination.

Consequently, producers were not eligible for crop insurance compensation when their deliveries were rejected by the processor. GIPSA, working with the confection sunflower seed industry, developed an official procedure for determining dark roast. The establishment of this procedure will assist producers in meeting crop insurance eligibility requirements when dark roast is included in the insurance policy.

GIPSA, working with the USDA Risk Management Agency and the State barley associations, prepared and distributed official procedures for the inspection of hull-less barley. The Risk Management Agency plans to review yield and quality data for hull-less barley to allow this commodity to become eligible for crop insurance coverage based on the official inspection procedures.

In response to a Farm Service Agency (FSA) need and to promote future sales to Russia, GIPSA prepared official inspection procedures under the AMA for buckwheat and whole buckwheat groats. FSA purchased 1,340 metric tons of whole buckwheat groats and 1,000 metric tons of buckwheat destined for Russia. This was a first-time FSA purchase for these two products. They expect other Russian requests for purchase in the future.

Railroad Track Scale Testing Program

GIPSA's railroad track scale testing program, which was implemented in 1978 as part of the USGSA-mandated equipment testing requirements, continues to grow. We continue to receive numerous requests for service. While our first priority remains testing grain industry railroad track scales, we provide service to the Association of American Railroads (AAR), the National Institute of Standards and Technology (NIST), and railroad companies on a time-available/cost-recovery basis. The testing program now has five railroad track scale test cars and may be expanded with an additional two cars.

Number of Certified Scales in Service at Export Elevators				
<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
272	253	256	258	258

Number of Railroad Track Scales Tested				
<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
110	136	155	204	186

**Inspection Program Data
Fiscal Years 1998-2000**

Item	Fiscal Years		
	1998	1999	2000
Quantity of Grain Produced ¹ (Mmt) ²	408.6	423.9	406.7
Quantity of Grain Officially Inspected (Mmt)			
Domestic	121.6	127.3	128.3
Export by GIPSA	71.3	85.3	84.3
by Delegated States/Official	<u>21.5</u>	<u>26.1</u>	<u>26.0</u>
Total	214.4	238.7	238.6
Delegated States/Official Agencies			
Delegated and Designated States	8	8	8
Designated States	7	7	7
Private Agencies	<u>47</u>	<u>44</u>	<u>44</u>
Total	62	59	59
State AMA Agreements	14	15	15
Number of Official Original Inspections and Reinspections			
GIPSA	122,325	126,753	118,939
Delegated States/Official Agencies	<u>1,830,992</u>	<u>1,852,033</u>	<u>1,824,222</u>
Total	1,953,317	1,978,786	1,943,161
<i>(continued)</i>			

¹ Source: USDA Crop Production Reports.

² Million metric tons.

Item	Fiscal Years		
	1998	1999	2000
Number of Grain Inspection Appeals			
Field Offices	3,443	3,103	3,103
Board of Appeals and Review	351	373	254
Number of Commercial Inspections			
GIPSA	0	0	9
Delegated States/Official Agencies	<u>383,181</u>	<u>457,288</u>	<u>532,232</u>
Total	383,181	457,288	532,241
Number of Wheat Protein Inspections			
GIPSA	38,210	43,642	37,922
Delegated States/Official Agencies	<u>436,202</u>	<u>460,661</u>	<u>462,239</u>
Total	474,412	504,303	500,161
Number of Soybean Protein and Oil Inspections			
GIPSA	15,855	16,880	17,873
Delegated States/Official Agencies	<u>5,424</u>	<u>5,723</u>	<u>4,023</u>
Total	21,279	22,603	21,896
Number of Aflatoxin Inspections	54,923	62,875	62,701
Number of DON Inspections	16,549	23,668	37,865
Quantity of Rice Inspected (Mmt) (milled basis)	3.9	3.5	3.4

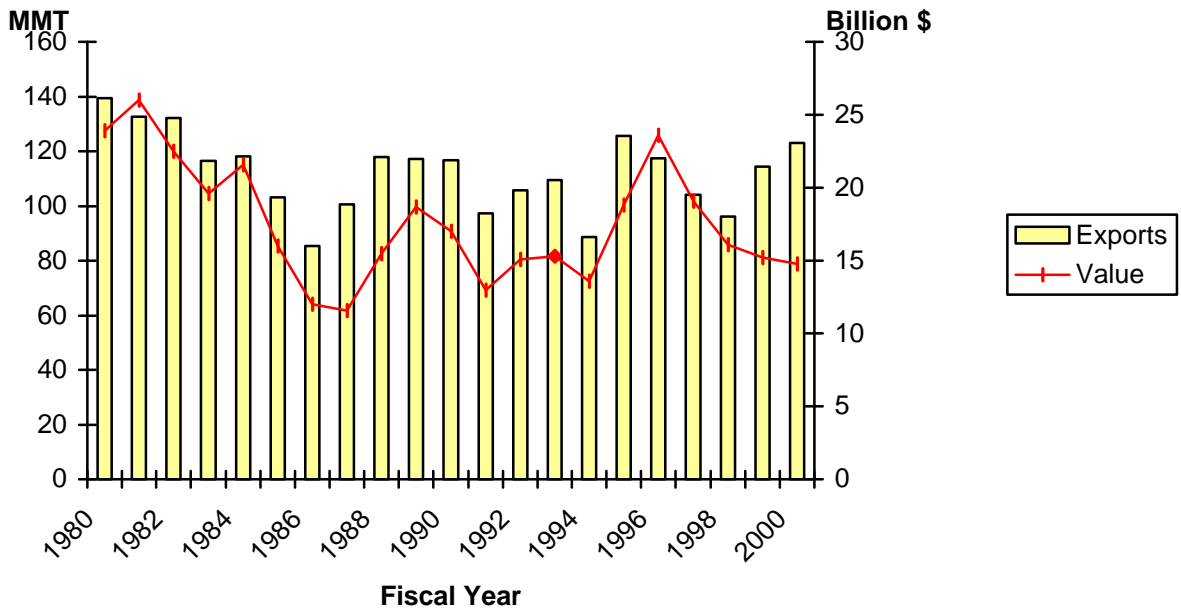
**Weighing Program Data
Fiscal Years 1998-2000**

Item	Fiscal Years		
	1998	1999	2000
Official Weight Certificates Issued			
GIPSA			
Class X ¹	70,741	79,967	76,349
Class Y ²	<u>8,412</u>	<u>10,612</u>	<u>12,666</u>
Total	79,153	90,579	89,015
Delegated States/Official Agencies			
Class X ¹	17,480	28,054	18,973
Class Y ²	<u>116,052</u>	<u>116,130</u>	<u>105,353</u>
Total	133,532	144,184	124,326
Exported Grain Weighed (Mmt)			
GIPSA	71.4	85.2	84.3
Delegated States	<u>17.4</u>	<u>21.3</u>	<u>21.1</u>
Total	89.8	106.5	105.4
Number of Certified Scales in Service			
Export Elevators	256	258	258
Number of Railroad Track Scales Tested	155	204	186

¹ Class X weighing involves 100 percent supervision.

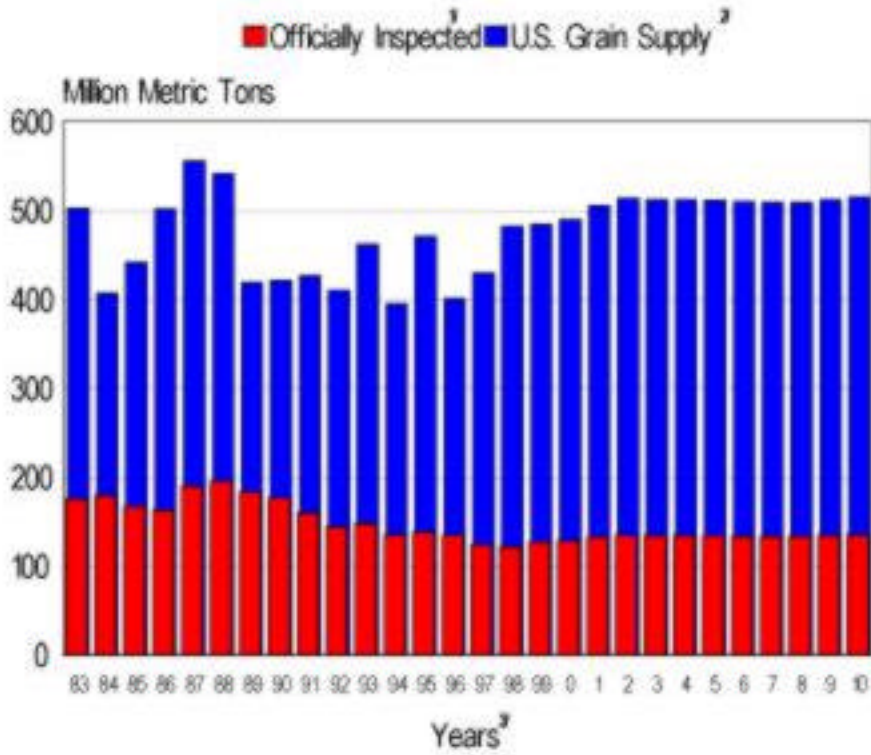
² Class Y weighing involves a minimum of 25 percent supervision.

U.S. Grain, Oilseed, and Rice Exports: Volume and Value



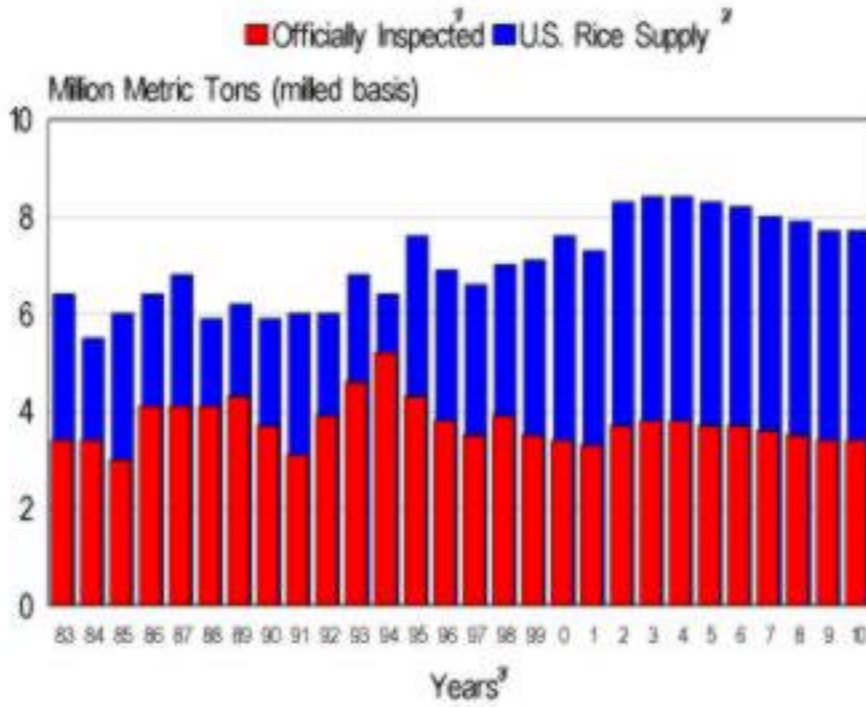
Sources: FGIS Export Grain Inspection System and the USDA Economic Research Service

U.S. DOMESTIC GRAIN INSPECTIONS



1 FCS OMS for 1983-01 and 2000 inspection rate (26.7%) applied to estimate supplies for 2001-2009
 2 USDA ERS market year figures for 1983-88, WASDE (Oct. 12, 2000) for 1989-2001 and WASO baseline projection for 2002-2010
 3 Domestic inspections are reported by fiscal years and U.S. grain supplies are by marketing years

U.S. RICE INSPECTIONS



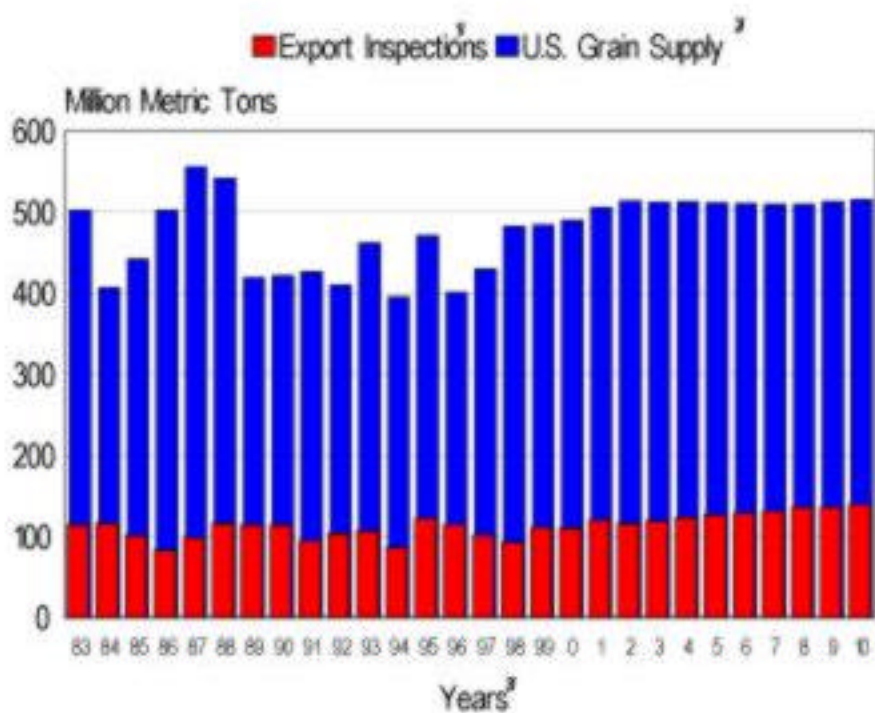
Sources

¹ FCS, AWC Copial Reports for 1983 - (Data 2010 inspection rate (94.7%) applied to estimated supply for 2011-2010)

² USDA, ERS market year figures for 1983-98, WACB (Cat. 12, 2003) for 1999-2011, and AWC baseline projections for 2012-2010.

³ Inspections are reported by fiscal year and U.S. rice supplies are by marketing years.

U.S. EXPORT GRAIN INSPECTIONS



Source

1. FCS, ECRS for 1983-02; WAGDE (Oct. 2, 2003) for 2003; and WAGD baseline projections for 2003-2010.

2. USDA, ERS, annual year figures for 1983-98; WAGDE (Oct. 2, 2003) for 1999-2003; and WAGD baseline projections for 2003-2010.

3. Export inspections are reported by fiscal years and U.S. grain supplies are by marketing years.

Volume of U.S. Grain Inspected for Export by Area Fiscal Year 2000

Million Metric Tons



Protecting Integrity

Administrative Claim

On May 1, 1995, several farmers and elevator operators from Montana, North Dakota, and South Dakota, filed an administrative claim against GIPSA (formerly the Federal Grain Inspection Service) for recovery of losses in protein premiums on wheat they sold during 1993 and 1994. The plaintiffs alleged that on May 2, 1993, GIPSA adopted a new wheat protein testing technology and, as a result, they received less money for their wheat due to lower protein measurements. The plaintiffs filed this action in the U.S. District Court, District of Montana, Great Falls, against the United States (Gollenhon Farming et al. V. United States). The Honorable Paul G. Hatfield, senior judge, U.S. District Court, District of Montana, dismissed all claims filed by the farmers and elevator operators. The plaintiffs' attorneys appealed the District Court's ruling. During FY 2000, the Honorable Raymond C. Clevenger III, circuit judge, U.S. Court of Appeals, Federal Circuit, ruled that the U.S. District Court, District of Montana, Great Falls, properly dismissed all claims filed by farmers and elevator operators.

Alleged Violations

At the beginning of FY 2000, 10 cases involving alleged violations of the USGSA and the AMA were pending further action. During FY 2000, GIPSA personnel opened 11 cases involving alleged violations and closed 6 cases, leaving 15 cases pending. Examples of alleged violations included: false weighing, deceptive loading and grain handling practices, issuing false official certificates, exporting grain without official inspection, performing official duties improperly, and employee misconduct.

GIPSA took administrative action in 4 of the 6 cases closed during FY 2000. These included cautionary letters to a firm and a licensee, a warning letter to a firm, and a civil monetary penalty against another firm. The other 2 cases were closed due to insufficient evidence to prove a violation. Also, during FY 2000, the Office of the Inspector General, USDA, and the Justice Department continued to pursue criminal action in an investigation involving false certification and weights of grain and false weight certification. Two subjects in this case signed plea agreements before a Grand Jury admitting their guilt in this situation. The two individuals agreed to testify against others involved in this matter. Indictments are pending for several individuals. The case remains open in the courts.

Registration

During calendar year 2000, GIPSA issued 79 Certificates of Registration to individuals and firms involved in foreign commerce grain business.

Compliance Reviews

Compliance reviews are independent third-party reviews of GIPSA field offices and official agencies (State and private agencies). During FY 2000, GIPSA personnel conducted compliance reviews of 3 GIPSA field offices, 2 suboffices, and 24 official agencies. Teams of reviewers evaluated customer satisfaction (including potential service delivery discrimination), management effectiveness and efficiency, and procedural compliance. During the reviews, GIPSA found no instances of service delivery discrimination. GIPSA did identify noncompliance items within the national inspection and weighing system. All identified noncompliances were subsequently corrected. None of the findings appear to have affected the overall integrity of GIPSA's mission or programs, or the national inspection system. Overall, field offices and official agencies are performing satisfactorily, thus meeting GIPSA's mission.

Conflicts of Interest

At the beginning of FY 2000, there were three designated official agencies operating with discretionary conflict-of-interest waivers. All three agencies remain designated with conflict waivers.

Delegation and Designation Programs

There are 59 official agencies designated under the U.S. Grain Standards Act to provide permissive official inspection and/or weighing services at domestic locations. Of these, eight are State entities, which also are delegated to provide mandatory official inspection and weighing services at export locations. Delegations are permanent unless GIPSA or the State decides to terminate the agreement.

Under the triennial renewal process, 22 official agency designations automatically terminated in FY 2000. GIPSA renewed 21 for full 3-year terms after reviewing their performance. One agency was granted only a 1-year designation because it only minimally met a major criterion for designation. The 1-year term allows the agency time to fully meet this criterion.

No official agency designations were cancelled this year.

Improved Licensing Program

GIPSA revised the licensing procedures to improve the processes for licensing while maintaining the integrity of the inspection and weighing programs. The revised procedures streamline the licensing process, add flexibility to the utilization of official agency staff, and implement a testing program to better evaluate the knowledge, skills, and abilities of licensed personnel. The revised procedures were developed with input and feedback from field office managers and official agency managers.

Drug-Free Workplace Certification

As each designated official agency becomes eligible for designation renewal, it must certify to FGIS that it provides a drug-free workplace.

Pilot Programs

In FY 2000, GIPSA continued operation of three pilot programs designed to provide the Agency with information on the effect of allowing more than one designated official agency to inspect or weigh grain in a single area.

The first pilot program addresses improving timeliness of service provided by official agencies to applicants for official services. The program allows official agencies to provide service to facilities located outside of their assigned area on a case-by-case basis, when official service cannot be provided within established timeframes. During FY 2000, 4 facilities received 54 inspections, which were for barge or railcar movement.

The second pilot allows an “open season” during which official agencies can offer their service to facilities outside their assigned area if no official service has been provided during the previous 3 months. During FY 2000, 83 facilities received 18,777 inspections, which included 1,164 for barge, 17,561 for railcar movements, and 52 for other movements (trucks, containers, and reinspections).

The third allows customers shipping grain in barges to select any official agency to probe-sample and inspect the grain. During FY 2000, one facility received eight barge inspections.

The pilot programs proved to be successful means of stimulating competition and improved customer service within the official system. Consequently, upon reauthorization of the U.S. Grain Standards Act, the existing pilot programs were incorporated into the U.S. Grain Standards Act as permanent exceptions, and GIPSA was given authority to develop additional pilot programs.

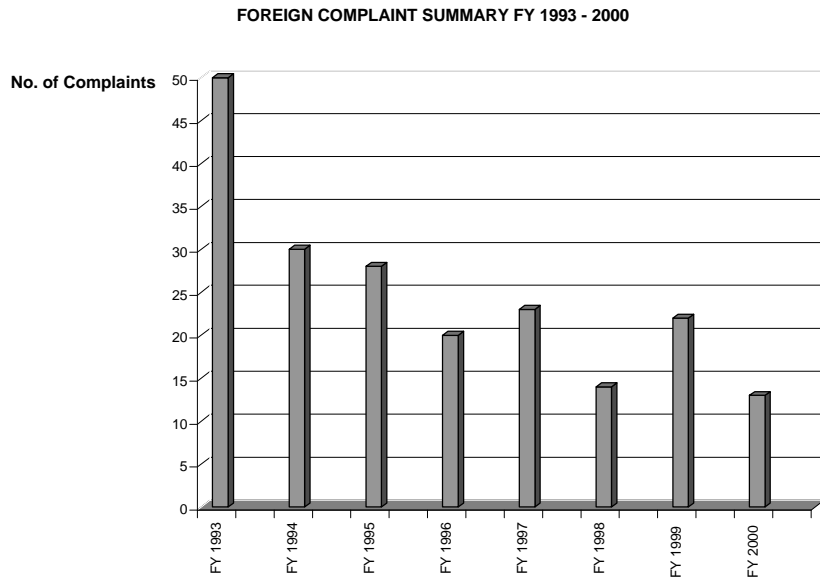
Complaints Reported By Importers

USDA administers a formal grain quality and weight discrepancy process under the regulations of the Foreign Agricultural Service. If an importer of U.S. grains files a complaint under this process, GIPSA analyzes samples retained on file from the original inspection and samples submitted from destination (if the buyer chooses to submit them) to evaluate whether the discrepancy was due to differences in samples, procedures, or an actual change in quality from the time of the original inspection.

The process verifies whether the original inspection and weighing service provided at the time of loading was correct, based on all available information. Once GIPSA identifies the source of the discrepancy, the Agency issues a report outlining its findings and providing suggestions to avoid similar discrepancies in the future.

Occasionally, a particular buyer or importing country reports repeated discrepancies which cannot be resolved by a shipment-by-shipment review under this process. In such cases, GIPSA may conduct collaborative sample studies or joint monitoring activities to address the discrepancy in a more comprehensive manner.

Since 1993, the number of complaints received from importers has shown a declining trend.



In FY 2000, GIPSA received 13 quality and 0 quantity complaints from importers on grains inspected under the Act. These complaints involved 355,853 metric tons, or about 0.3 percent by weight of the total amount of grain exported during the year. This compares to 20 quality and 2 quantity complaints received in FY 1999, representing about 1.4 percent of grain exports by weight.

**Summary of Complaints
Reported by Importers on
Inspection and Weighing
Fiscal Year 2000**

Complainant	Grain	Number of Complaints	Nature of Complaint
Africa and Middle East			
Jordan	Wheat	1	Infestation, vermin
Mozambique	Wheat	1	Test weight, dockage, foreign material, shrunken and broken kernels
South Africa	Wheat	1	Weed seeds
Yemen	Corn	1	Broken corn and foreign material, infestation
Asia			
China	Soybeans	1	Foreign material
Indonesia	Wheat	1	Damaged kernels, infestation
	Corn	1	Broken corn and foreign material
Malaysia	Wheat	1	Infestation
Sri Lanka	Wheat	3	Dockage, protein
Vietnam	Wheat	1	Falling Number, dockage, foreign material, shrunken and broken kernels, moisture
Europe			
Montenegro	Corn	1	Mycotoxins
TOTAL		13	