## National Leafy Greens Marketing Agreement Hearing Testimony – September 22, 2009

#### Introduction

My name is Suzanne Dash. I am an agricultural economist with the Economic Analysis and Program Planning Branch of the Fruit and Vegetable Programs of the Agricultural Marketing Service of the U.S. Department of Agriculture (USDA). I received a Bachelor's degree in agricultural economics from the University of Illinois in 1978 and a Masters degree in agricultural economics from the University of Wisconsin in 1982. I have worked for USDA since 1982.

My duties include providing economic analyses of the impact of changes in marketing order and agreement programs for fruits, vegetables, nuts and specialty products. I also conduct analyses of the marketing situation for fruits and vegetables that are purchased for domestic feeding programs.

For the National Leafy Greens Marketing Agreement Hearing, I have prepared a report titled "Leafy Greens Statistical Information." The sources for the data used in this report are the National Agricultural Statistics Service (NASS) and the Economic Research Service (ERS), of USDA and the U.S. Census Bureau of the Department of Commerce (Commerce).

Concerning the proposed marketing agreement, USDA takes a neutral position. The purpose of this testimony is to introduce relevant NASS, ERS, and Commerce data and other information into the hearing record. The testimony, data and charts are intended for use by participants in the Hearings and by USDA in discussing and analyzing the merits of the proposed marketing agreement.

The types of leafy green vegetables proposed to be included in the national marketing agreement include: the fresh mature and immature leafy portions of any of the following: arugula, cabbage (red, green and savoy), chard, cilantro, endive, escarole, kale, lettuce (iceberg, leaf, butter, head and romaine), parsley, radicchio, spinach, and spring mix. Under the proposal, the addition or removal of specific leafy green vegetables is authorized if recommended by the Marketing Agreement Committee and approved by the Secretary of Agriculture.

This testimony, and the "Leafy Green Vegetables Statistical Information" present the supply, utilization, grower prices, and trade in leafy green vegetables. Data for the United States (U.S.) and individual states is included. In its annual publications, NASS reports leafy green vegetable data only for the major producing states. More detailed information is available every 5 years from USDA's Census of Agriculture (Census). According to the latest Census, 9,274 farms harvested leafy green vegetables from 433,023 acres for the fresh market in 2007. The commodities in this total include head, leaf and romaine lettuce, head cabbage, spinach, Chinese cabbage, kale, escarole and endive, mustard cabbage, collards, mustard greens, and turnip greens.

# The supply, utilization, and price for head lettuce, leaf and romaine lettuce, fresh spinach and fresh cabbage

Annual per capita lettuce consumption was 21 pounds in the 1960s, 24 pounds in the 1970s and 25 pounds in the first half of the 1980s. Since the late 1980s, consumption has averaged about 30 pounds per person, an increase of 40 percent compared to the 1960s. The type of lettuce consumed has changed over this time period also. Until 1985, USDA reported annual data on head lettuce only (also known as iceberg). By 2008, head lettuce accounted for only 56 percent of lettuce production reported by USDA, with romaine and leaf accounting for the other 44 percent. Per capita consumption of fresh spinach and fresh cabbage is about 2 and 8 pounds per year, respectively.

### **HEAD (iceburg) LETTUCE**

Table 1 and charts 1 and 2 show the supply, utilization and farm price for head lettuce. Production in 2009 is forecast to total 5.3 billion pounds, making head lettuce the most popular type of lettuce grown in the U.S. However, head lettuce's average share of U.S. lettuce production has declined from an average of 77 percent during 1996-98 to 56 percent in 2006-08 while the popularity of leaf and romaine lettuce has surged. Head lettuce is harvested year-round in California. Of the other states with large production of head lettuce, Arizona harvests in the winter, New Jersey harvests in the spring and fall, and Colorado harvests in the summer. While head lettuce production was quite variable in the 1990s, production has generally declined since then to an estimated 5.3 billion pounds in 2009.

Table 2 shows the number of farms and acres harvested, by state, for head lettuce in 2007. According to the 2007 Census, 1,158 farms harvested head lettuce from nearly 167,000 acres. Although the farms harvesting head lettuce were spread over 48 States, only 3 states reported harvesting more than 1,000 acres of head lettuce: California (118,676 acres), Arizona (39,187 acres), and Colorado (2,268 acres).

#### LEAF AND ROMAINE

Table 3 and charts 3 and 4 show the supply, utilization and farm price for leaf and romaine lettuce. Because of increased demand for lettuce, and changes in the types of lettuce consumers prefer, leaf and romaine production from major states increased 125 percent between 1990 and 1999 and an additional 42 percent between 2000 and 2009, for a total of almost 3.9 billion pounds forecast to be produced in 2009. Leaf and romaine lettuce are harvested year round in California. The other state with large production of leaf and romaine lettuce is Arizona, which harvests in the winter.

Tables 4 and 5 show the number of farms and acres harvested, by state, for leaf lettuce and romaine in 2007. According to the 2007 Census, 2,891 farms in all 50 states harvested leaf lettuce from approximately 59,000 acres. For romaine lettuce, the figures are 1,057 farms in 49 states from 87,000 acres.

Note, if a farm harvested more than one type of leafy green vegetable in 2007, which is common, the farm would be included in the Census count of farms for each leafy green crop. It is not valid to add up the number of farms harvesting head lettuce with the number of farms harvesting romaine lettuce because there would be significant double counting.

#### **SPINACH**

Table 6 and charts 5 and 6 show the supply, utilization and farm price for fresh spinach. The demand for fresh spinach spurred average production increases of over 6 percent per year since 1990 with production from major states forecast to total 513 million pounds in 2009. Fresh market use now dominates consumption.

Table 7 shows the number of farms and acres harvested, by state, for fresh spinach in 2007. According to the 2007 Census, 1,121 farms in all 50 states harvested spinach for the fresh market from almost 30,000 acres. In 2007, the top 5 producers of spinach for the fresh market were California (harvesting 18,000 acres), Arizona (3,600 acres), Texas (2,200 acres), Colorado (1,900 acres) and New Jersey (1,500 acres). These states accounted for 94 percent of the fresh spinach acreage.

Of the other states with large production of fresh spinach, California harvests year round, Arizona and Texas harvest in the winter, Colorado harvests in the summer and New Jersey harvests in the spring and fall.

#### **CABBAGE**

Table 8 and charts 7 and 8 show the supply, utilization and farm price for fresh cabbage. Production increases for fresh cabbage have been significantly less than for lettuce and spinach over the past 20 years, reflecting more steady demand for fresh cabbage. Production averaged 2.3 billion pounds in the 1990s, 11 percent higher than the average for the 1980s. For the 10year period between 2000 and 2009 fresh cabbage production in major states averaged 2.4 billion pounds, 4 percent higher than the 1990s average. Most cabbage is grown for the fresh market.

Table 9 shows the number of farms and acres harvested, by state, for fresh cabbage in 2007. In 2007, 88 percent of harvested cabbage acreage was for fresh use. In 2007, the top 5 producers of cabbage for the fresh market were California (harvesting 14,000 acres), New York (10,300 acres), Florida (9,800 acres), Texas (6,800 acres) and Georgia (6,600 acres). Fresh cabbage production is less concentrated geographically than lettuce and spinach. The top 5 states accounted for 67 percent of the fresh cabbage acreage. Other states that produce large quantities of fresh cabbage include North Carolina, Wisconsin and Arizona. According to the 2007 Census, 3,986 farms in all 50 states harvested cabbage for the fresh market from close to 71,000 acres. Of the states with large production of fresh cabbage, Florida, Georgia and Texas harvest in the winter and spring, California harvests year round, and New York harvests in the summer.

Charts 9 and 10 compare the production and grower prices for the major leafy green vegetables.

# Minor crops

The 2007 Census included data on 6 additional leafy green vegetables; chinese cabbage, collards, escarole & endive (combined), kale, mustard greens and turnip greens. Table 10 shows the number of farms that harvested each crop in 2007 and the number of harvested acres.

## **Imports and Exports**

Some leafy green vegetables, like lettuce, are hardy cool season vegetables and can be grown in the desert southwest of California and Arizona and in the Rio Grande Valley of Texas. Thus, imports during the winter and spring tend to be lower than that of other vegetables.

The import share of consumption of leafy green vegetables has increased over the past two decades, but remains small.

Tables 11 through 14 show imports of leafy green vegetables by country. Most lettuce consumed in the United States is produced domestically. Over the past 10 years, less than 2 percent of the U.S. lettuce supply was imported. For fresh spinach and fresh cabbage, the percentages imported were 3.3 percent and 4.1 percent, respectively.

Tables 15 through 17 show exports of leafy green vegetables by country. Export figures are larger than imports. Head lettuce exports since 2000 have averaged 6.9 percent of production. Leaf and Romaine lettuce exports have averaged 14.4 percent of production over the same time period. For fresh spinach and fresh cabbage, the percentages exported were 10 percent and 3.3 percent, respectively. Most exports go to Canada.

This concludes my remarks concerning the statistical exhibits I have presented at this hearing.