CHOICES
The magazine of food, farm, and resource issues
A publication of AAEA Agricultural & Applied Economics Association
VOLUME 40 QUARTER 4

Production Processes and Sustainability Challenges for US Sweetpotatoes

Kuan-Ming Huang, Will Maples, and Chang Liu

JEL Classifications: Q01, Q13, Q17, Q56
Keywords: Export, Production process, Sweetpotato, Supply chain, Sustainable production

Sweetpotatoes are classified as a specialty crop under the USDA classification and are considered a staple crop in many countries, including the United States. They are rich in health-promoting compounds such as beta-carotene, carotenoids, and anthocyanins. These bioactive compounds have antioxidant, anti-inflammatory, and immune-boosting properties and may help reduce oxidative stress, regulate blood glucose, and lower the risk of chronic diseases (Grace et al., 2015; Rodriguez-Amaya, 2015; Rodrigues de Albuquerque, Sampaio, and de Souza, 2019; Mendes-Silva et al., 2020). Their high nutritional value, low allergenic potential, and easy digestibility also make sweetpotatoes a popular ingredient in homemade and commercial baby foods worldwide.

As the United States is one of the top sweetpotato producers and exporters in the world, an overview of US sweetpotato production system—along with an introduction of available sustainable production practices and a discussion of the challenges in adoption of such practices—offers valuable insights for both domestic growers, prospective farmers, and producers from other countries. In the following sections, we cover two major topics: (1) US sweetpotato production processes and sustainable practices and (2) the major uses of US sweetpotatoes. Challenges facing growers, particularly difficulties in adopting sustainable production practices and the potential decline in domestic consumption, are discussed in each subsection. The article will conclude with a discussion of future research aimed at addressing the challenges facing US sweetpotato growers and promoting sustainable production practices.

US Sweetpotato Production Process and Sustainable Practices

From 2000 to 2018, nearly half of the domestically produced sweetpotatoes in the United States came from North Carolina (46%), followed by California (22%), Mississippi (15%), Louisiana (10%), and all other states combined (7%) (Figure 1). Recognizing North Carolina's dominant role in the US sweetpotato industry, to better introduce standard commercial production practices in the United States, the authors interviewed the sales and marketing manager from one of North Carolina's largest sweetpotato farms.

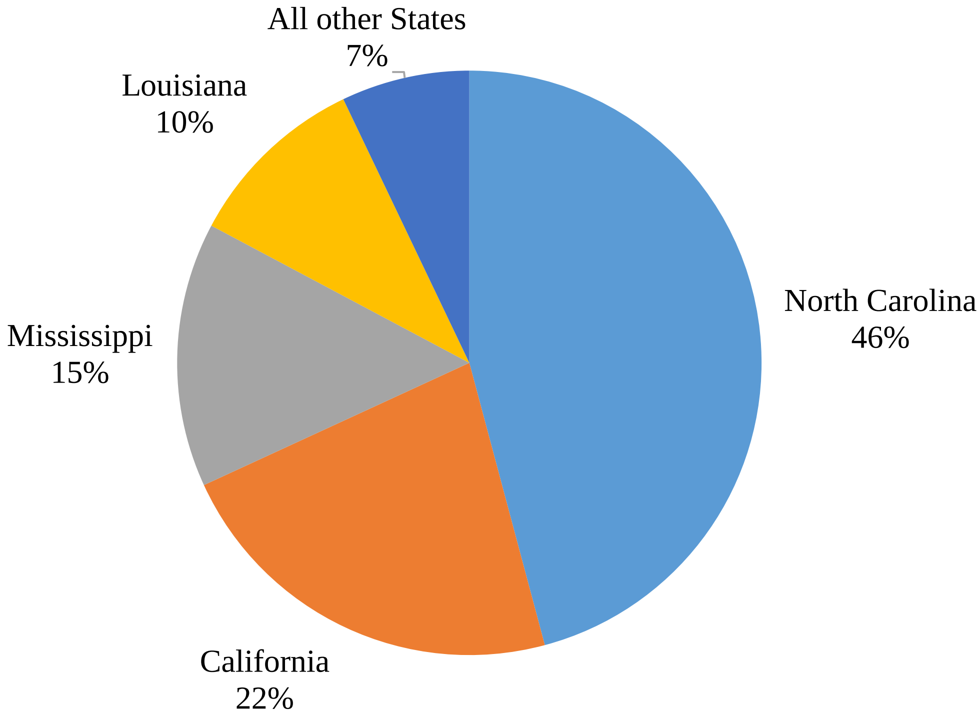
In this section, the commercial production processes of sweetpotatoes will be introduced in order, from sourcing plant stock to harvesting and curing (Figure 2). Currently available sustainable production practices will be introduced, and the challenges growers face in adopting sustainable practices will also be discussed.

Sourcing Planting Stock, Bedding Seedstock, and Producing Slips

Sweetpotato production must first begin with sourcing planting stock. Some producers source planting stock from storage roots that they have saved on their operation. Sweetpotato plants are reproduced by vegetative propagation, a method of asexual reproduction where new plants grow from parts of a parent plant, specifically the roots. The fact that producers can save roots each year to be used for next year's seedstock may sometimes introduce issues with viral and pest infections. Many producers use seed material from the previous season with little knowledge of the virus and pest infection status. Throughout successive generations of plantings, the viral and pest load will increase, resulting in a decline in yield and an increase in chemical use.

Producers are encouraged to regularly source and plant clean, virus-tested plants. However, supply constraints of clean plants and the increased cost of purchasing new clean plants lead to many producers delaying the planting of clean plants until after the optimal time. The National Clean Plant Network for sweetpotatoes (NCPN-Sweetpotatoes: https://www.nationalcleanplantnetwork.org/sweetpotatoes) is one entity that researches and promotes the benefits of clean planting stocks. This network is an

Figure 1. Major Sweetpotato Producing States by Production Volume, 2000–2018



Source: Authors' calculation based on data retrieved from USDA National Agricultural Statistics Service (USDA NASS) (2025).

Notes: Production volumes for Louisiana after 2018 are not available in the USDA database; therefore, the production share presented here is based solely on data from 2000 to 2018.

association of clean plant centers, scientists, educators, state and federal regulators, and others under the umbrella of the USDA. According to the NCPN, sweetpotato clean seed programs are currently established in Arkansas, California, Hawaii, Louisiana, Mississippi, and North Carolina to educate and assist sweetpotato growers and support the sustainability of US sweetpotato seed programs.

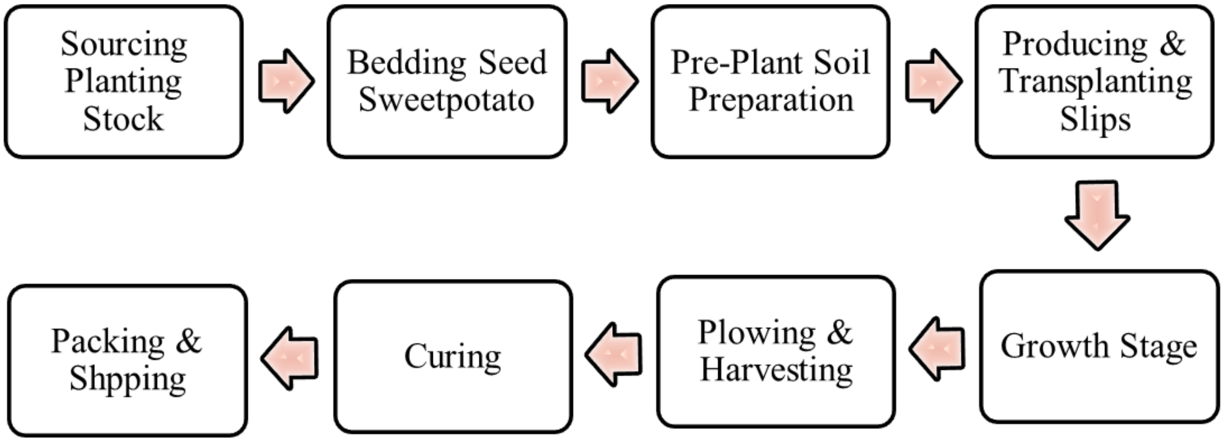
Once seedstock is sourced, they are bedded to produce slips (sprouts that grow from mature sweetpotatoes). The irrigated, soil-covered beds are topped with perforated plastic, creating a greenhouse effect that fosters optimal growing conditions. After approximately four weeks, once the seed sweetpotatoes have produced sufficient sprouts, cuttings of the slips are taken and transplanted. This transplantation process is highly labor-intensive, as each slip is hand-cut and manually placed into the transplanter. The transplanted slips are then cultivated, as they develop into sweetpotato hills (soil mounds around the sweetpotato plants).

Growth Stage: Weed and Insect Management

During the growth stage, producers face many costly and labor-intensive activities, including weed and insect management. The current most popular cultivars in the United States, 'Beauregard' and 'Covington,' are both highly susceptible to weed interference (Meyers and Shankle, 2015). Current conventional weed management practices involve a combination of herbicides, hand-weeding, and cultivation. Hand-weeding is environmentally friendly but perhaps the costliest weed management practice. The estimated cost of hand-weeding is $510 per acre in the southeastern United States (George et al., 2024). Hand-weeding is required when sweetpotato vines cover the row, limiting the use of tractors for spraying. Most organic producers need to hand-weed because they are more susceptible to the impacts of weed management issues due to their inability to use synthetic herbicides and lack of organic alternatives.

Laying black plastic mulch is another common preplanting soil preparation practice in commercial agriculture production to reduce weed pressure for vegetables, and it has been commonly adopted by sweetpotato growers (Adebizi, Adekiya, and Ojeniyi, 2016; Sapakhova et al., 2024). Black plastic mulch prevents sunlight, which is required for weed germination, from reaching the soil surface. The soil heating effect can inhibit weed seed germination or even thermally kill shallow weed seeds. The plastic mulch also works as a physical barrier that prevents weed emergence (Amare and Desta, 2021).

Figure 2: Sweetpotato Commercial Production Process Flowchart



Source: Authors' compilation based on interviews and expert knowledge.

Growing cover crops is also encouraged for weed suppression and considered to be a sustainable practice. Cover crops are noncash crops grown primarily between the periods of regular crop production. More sweetpotato growers are now adopting cover crops during winter, and common cover crops include legumes, grasses, and brassicas. Cover crops are fast-growing and can outcompete weeds for light, water, and nutrients, and ultimately achieve the goal of weed control. Besides weed suppression, cover crops can increase soil organic matter, enhance soil structure, and prevent soil erosion (Koudahe, Allen, and Djaman, 2022; Quintarelli et al., 2022)

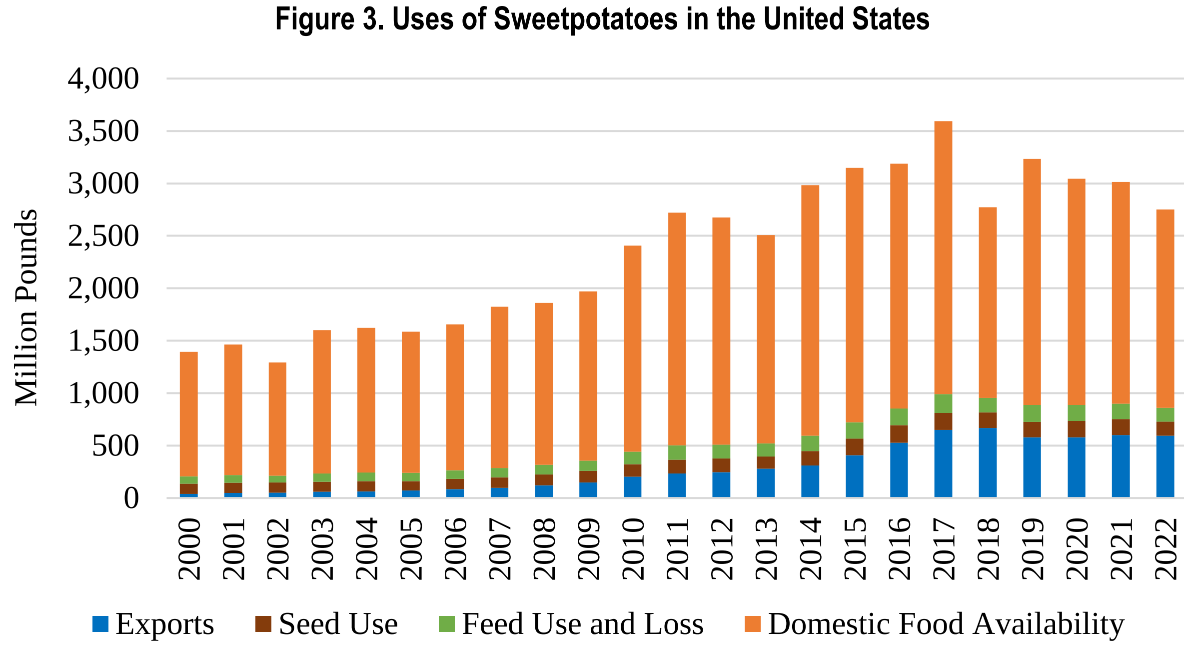
Insecticide treatment costs are another significant financial burden on sweetpotato producers. Sweetpotato production faces numerous pest challenges, with the primary pests being wireworms and sweetpotato weevils. While some cultivars are resistant to wireworms and foliar insects, they lack the desirable agronomic characteristics of the 'Beauregard' and 'Covington' cultivars (George et al., 2024). Sweetpotato weevils are another major pest that has led to the decline of sweetpotato production. Pheromone traps with male annihilation and sterile insect techniques have been shown to effectively monitor and control the weevil population and can potentially lead to less dependence on commercially available insecticides (George et al., 2024).

Growth Stage: Virus and Nematode Control

Plant disease is another key challenge in sweetpotato production, with viruses and plant-parasitic nematodes being the most pressing issues. Over 30 viruses have been identified in sweetpotatoes, often in mixed infections, which complicates the diagnosis and control of virus infections (Loebenstein and Thottappilly, 2009). Depending on the type of virus, symptoms could include yield loss, reduced root quality, plant stunting, and more. The management task is challenging since no chemical control exists for plant viruses. Although some resistant varieties exist, they are strain specific. Virus complexes can cause synergistic effects, which would lead to greater yield damage than an individual virus (Valverde, Clark, and Valkonen, 2007). The most effective and environmentally sustainable way to control sweetpotato virus is to use virus-free planting materials. These healthy plants are also more resilient to insect and pest threats, which reduces the need for intensive chemical treatments. However, many producers have difficulties purchasing new, clean plants due to financial constraints.

Plant-parasitic nematode is another major threat in sweetpotato production. Several species of nematodes—including root-knot nematode (Meloidogyne spp.), lesion nematode (Pratylenchus spp), and reniform nematode (Rotylenchulus reniformis)—are commonly seen in sweetpotato production areas. In recent years, the guava root-knot nematode (Meloidogyne enterolobii) has posed a serious and emerging threat to the sweetpotato industry, particularly in North Carolina (Liu, Grabau, and Desaeger, 2022). Guava root-knot nematode is highly aggressive and can overcome the resistance gene that has been developed against other root-knot nematode species. Some fields have reported 30%–60% yield loss due to this nematode.

Currently, only a few plant-parasitic nematode management strategies are available for sweetpotato growers, including chemical application, crop rotation, and resistant cultivars (Liu and Grabau, 2022). For chemical application, both fumigant and nonfumigant nematicides are available for sweetpotato growers. Fumigant nematicides are an effective but not environmentally friendly solution. Compared to



Source: USDA Economic Research Service (USDA ERS) (2024).

nonfumigant nematicides, fumigations can cause greater harm to long-term soil health and pose a higher risk of more serious water contamination and air pollution in the surrounding areas. The operational safety concerns of fumigant nematicide applications also raise concerns among some growers. Nonfumigant nematicides are usually recognized as the more sustainable among the chemical application options (Liu and Grabau, 2022).

For weed management and plant disease control, crop rotation is often recommended as a sustainable solution. However, for nematode management, the effectiveness of crop rotation is highly dependent on the specific nematode species. Growers are strongly encouraged to submit samples for nematode assay if they suspect their field is infested with plant-parasitic nematodes. Plant-parasitic nematodes can persist in the soil for a long time. Although crop rotation can significantly reduce nematode populations, nematode abundance can quickly resurge after a susceptible host is reintroduced into the field (Castagnone-Sereno et al., 2013). In particular for sweetpotatoes, most nematode species have a wide host range, making it challenging for growers to find a suitable rotational crop that is a nonhost or poor host for nematodes.

Resistant cultivar is another potential sustainable solution, however, currently, there are resistant cultivars available only against southern root-knot nematode (Meloidogyne incognita). Some common sweetpotato cultivars, such as ‘Covington,’ integrate moderate resistance to the endemic root-knot nematode species and can help suppress nematode populations. However, these same cultivars are highly susceptible to guava root-knot nematode (Meloidogyne enterolobii) (Rutter et al., 2021). The absence of sweetpotato cultivars with resistance to multiple common nematodes limits the effectiveness of resistant varieties in commercial production.

Harvesting and Curing

Once the sweetpotatoes reach maturity, they are plowed using a sweetpotato plow, which lifts them to the surface, allowing sweepotatoes to be handpicked. Harvest typically occurs between September and November in North Carolina. Hand harvesting is essential when harvesting fresh market sweetpotatoes due to their delicate skin; mechanical harvesting could cause scratches and bruises, which can negatively impact their appearance, quality, and shelf life.

After harvesting, the sweetpotatoes are placed into wooden bins and transported to a storage facility, where they are tagged with the field name and harvest date for traceability. This is also where the curing process begins. Curing involves increasing heat and humidity in the storage room, causing the sweetpotatoes to “sweat.” This process converts starches into sugars and enhances their sweetness and shelf life. Properly cured sweetpotatoes can be stored for up to 12 months, allowing packing and shipping to occur throughout the year.

Cured sweetpotatoes are retrieved from storage and packed according to size. They are then stored in a temperature- and humidity-controlled room before being distributed. Internationally, US sweetpotato growers export their produce to wholesalers in destination countries. These imported sweetpotatoes are then supplied to grocery stores, food markets, and restaurants, ultimately reaching consumers. Domestically, wholesalers purchase sweetpotatoes from growers and resell and distribute them to grocery stores, food markets, and restaurants before they reach consumers, while a smaller portion is sold directly from growers to retailers.

Uses of US Sweetpotatoes

Figure 3 illustrates the major uses of sweetpotatoes in the United States from 2000 to 2022, measured in millions of pounds. The data are categorized into four groups: domestic food availability (orange), exports (blue), feed use and loss (green), and seed use (brown). Domestic food use remained the largest usage category, despite its share among all uses declining from 85% in 2000 to 69% in 2022. Exports have risen significantly, increasing from 3% of total use in 2000 to 21% in 2022, making them the second-largest category. Feed, loss, and seed use stayed relatively stable, together accounting for about 5% of total usage throughout the period.

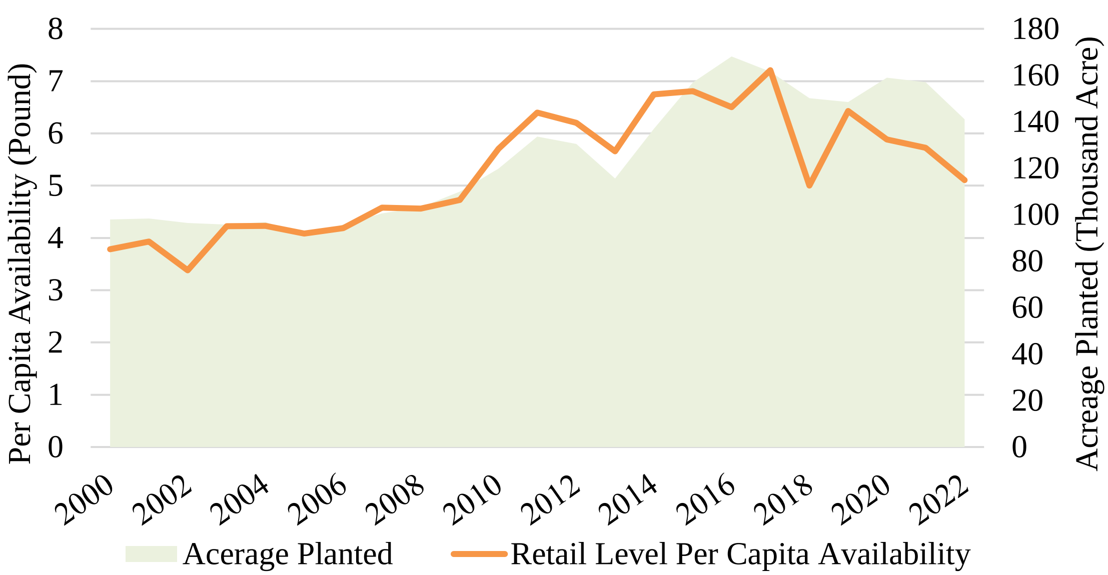
Domestic Food Availability

Figure 4 shows the per capita availability of sweetpotatoes in the United States from 2000 to 2022. The orange line represents sweetpotato availability. Some people may interpret the per capita food availability reported by the USDA ERS as per capita food consumption, but this is not entirely accurate. The main reason is that food availability has not been fully adjusted for losses, spoilage, or waste. Nonetheless, per capita food availability can still serve as a useful proxy or an approximate indicator of food consumption, particularly when trends are the primary focus of our discussion here. Availability follows a general upward trend, with notable increases after 2008, peaking in 2017. Following the peak, there was a sharp decline in availability in 2018, caused by Hurricane Florence, which struck sweetpotato growing regions in North Carolina, the top sweetpotato producing state, in September (Parr, 2019). This event led to the largest single-year drop in sweetpotato availability in the United States since the 1960s. By 2019, availability had recovered to the 2016 level. However, it began to decline steadily in subsequent years, potentially due to the decrease of sweetpotato acreages across the United States; a 16% decrease from 168,100 acres in 2016 to 141,000 acres in 2022 (Figure 4). From our communication with sweetpotato growers, some express that the significant increases in input costs over the past few years are the top reasons for them to cut down on acreage on sweetpotatoes.

On the other hand, the consecutive years (2019–2022) of decreased domestic availability may signal a potential declining trend in sweetpotato consumption. To encounter this potential shift, the sweetpotato industry has been exploring the potential for value-added products, new product lines, and additional revenue streams. For example, sweetpotato fries are the most popular value-added product made from sweetpotatoes.

However, currently available sweetpotato varieties lack a

Figure 4. Sweetpotato per Capita Availability and Acreage Planted in the United States, 2000-2022



Source: USDA Economic Research Service (USDA ERS) (2024).

crispy exterior and require batter (Allan et al., 2021; George et al., 2024). Further research is needed to identify the sweetpotato attributes that improve the texture of fried sweetpotatoes. Another potential avenue for the US sweetpotato industry is purple sweetpotatoes, which are currently a niche market in the United States. There is a need for further research on cultivars with traits that the US population finds favorable. Last, another important ongoing objective of the sweetpotato industry is to find a use for "canners." Canners are the lowest grade of sweetpotato; they are often are abandoned in the field due to their low value and the high cost of harvesting. Canners are still perfectly suitable for consumption, but their smaller, irregular size makes them undesirable to wholesalers. The creation of further value-added opportunities would increase the marketability of lower-grade sweetpotatoes and ultimately improve overall farm profitability. As one example of a solution, Mississippi State University has introduced sweetpotato dog treats to help drive a market for canners.

Exports

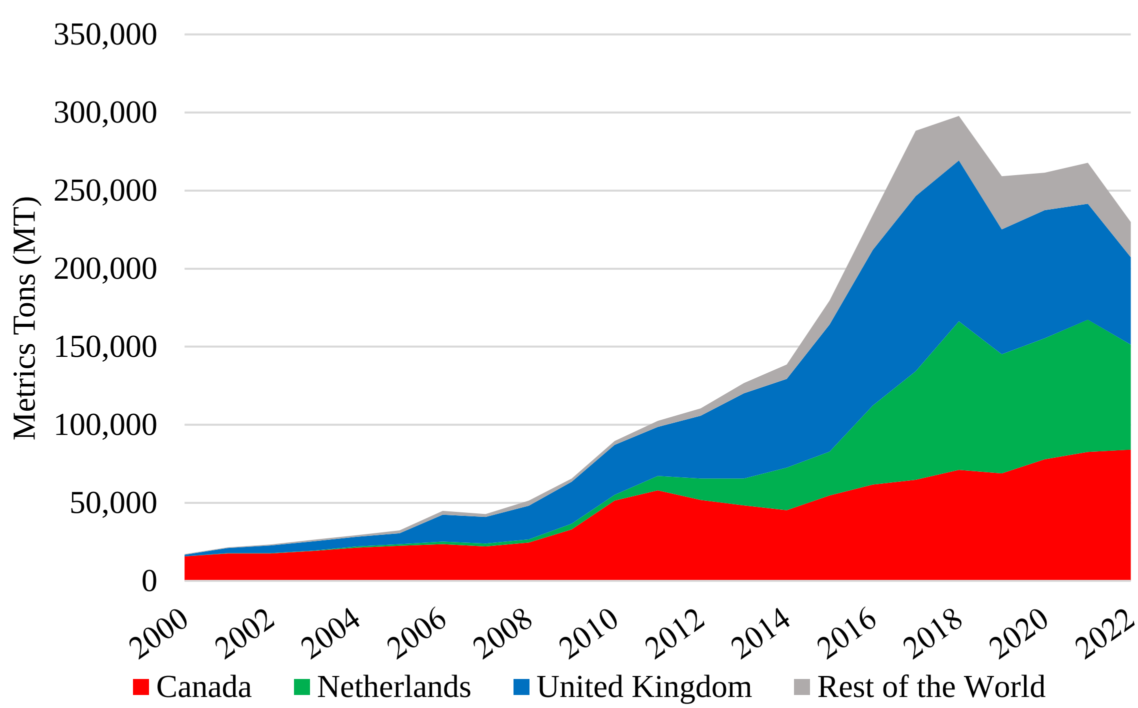
Exports have grown substantially over the past 2 decades. In 2000, export was the smallest category among the uses of US sweetpotatoes, accounting for only 3% of total usage; by 2022, this percentage had reached 21%, making exports the second-largest category. Export volume increased 1500% from less than 40 million pounds in 2000 to around 600 million pounds in recent years, suggesting a rapidly growing international demand for US sweetpotatoes, mainly from Canada and European markets.

Canada, the United Kingdom, and the Netherlands are the top three export destinations for US sweetpotatoes, collectively accounting for over 90% of total exports in 2022 (Figure 5). In the early 2000s, more than 90% of US sweetpotato exports were destined for Canada. Over the past 2 decades, while export volume to Canada has steadily increased, shipments to the Netherlands and the United Kingdom have grown at a much faster rate. As a result, although Canada remains the largest export destination, its share of total US sweetpotato exports declined significantly, to 35% in 2022. It is also worth noting that the Netherlands is the major import hub for overseas agricultural goods in Europe; a large proportion of its imported agricultural commodities, including US sweetpotatoes, are re-exported and shipped to other European countries. This explains why the Netherlands, despite having a population of only 18 million, imports more sweetpotatoes than the United Kingdom, which has a population of nearly 70 million.

Feed and Seed Uses

Feed and seed uses are the two smallest categories and showed minimal fluctuations over the years. Their share of total usage remained fairly consistent at around 5%

Figure 5. US Sweetpotato Export Volume by Destination, 2000–2022



Source: USDA Foreign Agricultural Service (USDA FAS) (2025).

throughout the period. For feed use, sweetpotatoes are a cost-effective energy source for cattle, fish, pigs, and poultry diets (Thibodeau, Poore, and Rogers, 2002; Villano et al., 2016). They are high in moisture, starch, and carbohydrates but low in fat, protein, and essential minerals, so additional nutrients must be supplemented when including sweetpotatoes in animal feed. Fresh sweetpotatoes can replace a portion of the traditional grain fed, and even processing waste can be ensiled for cattle feed by mixing with dry grass hay or corn silage. When properly incorporated, feeding trials have shown that sweetpotatoes can support weight gains comparable to those achieved with traditional diets (Agwunobi, 1999; Thibodeau, Poore, and Rogers, 2002).

A small portion (2%–3%) of the overall sweetpotato crop is specifically grown by certified seed distributors for seed use, ensuring clean and reliable planting. Using disease-free sweetpotatoes as seed potatoes minimizes the risks of yield losses and disease outbreaks, benefiting both individual growers and the entire sweetpotato industry. These clean seeds are vital for safeguarding the health of US sweetpotatoes and their growing environments, reducing chemical use throughout the production process, and supporting the overall sustainability of the sweetpotato industry in the United States.

Concluding Remarks

This article presents the standard commercial production processes for sweetpotatoes based on interviews with the sales manager of one of the largest sweetpotato farms in North Carolina. It also introduces sustainable production practice options available at each stage of the production cycle. Each stage offers opportunities to enhance the sustainability of sweetpotato farming but also presents unique challenges for growers. During the planting stage, securing clean, virus-free planting stock is critical for long-term yield and environmental sustainability. These healthy plants are not only virus-free but also more resilient to insect and pest threats, which reduces the usage of chemical treatments. However, widespread adoption of clean seed programs is hindered by high costs and limited supply. In the growth stage, weed, insect, virus, and nematode management remain major challenges. Sustainable practices such as hand-weeding, cover cropping, crop rotation, and using resistant cultivars can be promising and effective when dealing with certain pests and diseases. Unfortunately, there is no one silver-bullet solution that can address all threats, and adopting these sustainable practices often involves trade-offs related to cost and labor. At harvest, handpicking remains standard to preserve root quality, while curing extends shelf life and supports year-round market access.

In terms of market distribution, domestic food consumption continues to be the primary use of US sweetpotatoes, though its share has slightly declined in recent years. Exports have grown significantly and now account for over one-fifth of total usage, driven by increasing demand in Canada and Europe. Meanwhile, value-added products such as sweetpotato fries and dog treats made from lower-grade canners offer opportunities to boost farm profitability and reduce crop waste. Although seed use represents a smaller share of total usage, it plays a critical role in supporting the sustainability of clean sweetpotato seed programs in the United States.

Expanding the US sweetpotato industry and promoting sustainable production practices will require ongoing innovation, particularly in the areas of pest and disease management. Continued research into disease-resistant cultivars, cover crops, and nonfumigant pest control methods can enhance both the effectiveness and accessibility of sustainable practices and eventually increase growers’ willingness to adopt them. On the marketing side, evaluating the potential of advertising “sustainably produced” as a value-added product attribute in sweetpotato products can be a promising direction for future consumer research.

For More Information

Adebisi, S., A. Adekiya, and S. Ojeniyi. 2016. "Study into Tillage-Mulch Package for Production of Sweet Potato (*Ipomoea batatas* L.) Effect on Soil Properties and Yield." *Scientia Agriculturae* 15(2):361–366. http://dx.doi.org/10.15192/PSCP.SA.2016.15.2.361366

Agwunobi, L. 1999. "Performance of Broiler Chickens Fed Sweet Potato Meal (*Ipomoea batatas* L.) Diets." *Tropical Animal Health and Production* 31:383–389. https://doi.org/10.1023/A:1005229309830

Allan, M.C., N. Marinos, S.D. Johanningsmeier, A. Sato, and V.D. Truong. 2021. "Relationships between Isolated Sweetpotato Starch Properties and Textural Attributes of Sweetpotato French fries." *Journal of Food Science* 86(5):1819–1834. https://ift.onlinelibrary.wiley.com/doi/10.1111/1750-3841.15725

Amare, G., and B. Desta. 2021. "Coloured Plastic Mulches: Impact on Soil Properties and Crop Productivity." *Chemical and Biological Technologies in Agriculture* 8(1):1–9. https://doi.org/10.1186/s40538-020-00201-8

Castagnone-Sereno, P., E.G. Danchin, L. Perfus-Barbeoch, and P. Abad. 2013. "Diversity and Evolution of Root-Knot Nematodes, Genus Meloidogyne: New Insights from the Genomic Era." *Annual Review of Phytopathology* 51(1):203–220. https://doi.org/10.1146/annurev-phyto-082712-102300

George, J., G.V. Reddy, P.A. Wadl, W. Rutter, J. Culbreath, P.W. Lau, T. Rashid, M.C. Allan, S.D. Johaningsmeier, and A.M. Nelson. 2024. "Sustainable Sweetpotato Production in the United States: Current Status, Challenges, and Opportunities. *Agronomy Journal* 116(2):630–660. https://doi.org/10.1002/agj2.21539

Grace, M.H., A.N. Truong, V.D. Truong, I. Raskin, and M.A. Lila. 2015. "Novel Value-Added Uses for Sweet Potato Juice and Flour in Polyphenol- and Protein-Enriched Functional Food Ingredients. *Food Science and Nutrition* 3(5):415–424. https://doi.org/10.1002/fsn3.234

Koudahe, K., S.C. Allen, and K. Djaman. 2022. "Critical Review of the Impact of Cover Crops on Soil Properties. *International Soil and Water Conservation Research* 10(3):343–354. https://doi.org/10.1016/j.iswcr.2022.03.003

Liu, C., and Z. Grabau. 2022. "Meloidogyne Incognita Management Using Fumigant and Nonfumigant Nematicides on Sweet Potato." *Journal of Nematology* 54(1):20220026. https://doi.org/10.2478/jofnem-2022-0026

Liu, C., Z.J. Grabau, and J. Desaeger. 2022. "Guava Root-Knot Nematode *Meloidogyne enterolobii*: EENY-793/IN1372, 9/2022." *EDIS* 2022(4). https://doi.org/10.32473/edis-in1372-2022

Loebenstein, G., and G. Thottappilly. 2009. *The Sweetpotato*. Springer.

Mendes-Silva, T.d.C.D., R.F. da Silva Andrade, M.A. Ootani, P.V.D. Mendes, M.R.F. da Silva, K.S. Souza, M.T. dos Santos Correia, M.V. da Silva, and de M.B.M. Oliveira. 2020. "Biotechnological Potential of Carotenoids Produced by Extremophilic Microorganisms and Application Prospects for the Cosmetics Industry." *Advances in Microbiology* 10(08):397. https://doi.org/10.4236/aim.2020.108029

Meyers, S.L., and M.W. Shankle. 2015. "Interference of Yellow Nutsedge (*Cyperus esculentus*) in 'Beauregard' Sweet Potato (*Ipomoea batatas*)." *Weed Technology* 29(4):854–860.

Parr, B. 2019. "U.S. Sweet Potato Production Declined 23 Percent in 2018 Due to Hurricane Florence." *Charts of Note*. USDA Economic Research Service. Available onkine: https://www.ers.usda.gov/data-products/charts-of-note/chart-detail?chartId=93150

Quintarelli, V., E. Radicetti, E. Allevato, S.R. Stazi, G. Haider, Z. Abideen, S. Bibi, A. Jamal, and R. Mancinelli. 2022. "Cover Crops for Sustainable Cropping Systems: A Review." *Agriculture* 12(12):2076. https://doi.org/10.3390/agriculture12122076

Rodrigues de Albuquerque, T.M., K.B. Sampaio, and E.L. de Souza. 2019. "Sweet Potato Roots: Unrevealing an Old Food as a Source of Health Promoting Bioactive Compounds–a Review. *Trends in Food Science and Technology* 85:277–286. https://doi.org/10.1016/j.tifs.2018.11.006

Rodriguez-Amaya, D.B. 2015. *Food Carotenoids: Chemistry, Biology and Technology*. Wiley. https://doi.org/10.1002/9781118864364

Rutter, W.B., P.A. Wadl, J.D. Mueller, and P. Agudelo. 2021. "Identification of Sweet Potato Germplasm Resistant to Pathotypically Distinct Isolates of *Meloidogyne enterolobii* from the Carolinas." *Plant Disease* 105(10):3147–3153. https://doi.org/10.1094/PDIS-02-20-0379-RE

Sapakhova, Z., K.R. Islam, M. Toishimanov, K. Zhapar, D. Daurov, A. Daurova, N. Raissova, R. Kanat, M. Shamekova, and K. Zhambakin. 2024. "Mulching to Improve Sweet Potato Production." *Journal of Agriculture and Food Research* 15:101011. https://doi.org/10.1016/j.jafr.2024.101011

Thibodeau, M.S., M.H. Poore, and G.M. Rogers. 2002. "Health and Production Aspects of Feeding Sweetpotato to Cattle." *Veterinary Clinics: Food Animal Practice* 18(2):349–365. https://doi.org/10.1016/s0749-0720(02)00022-1

U.S. Department of Agriculture Economic Research Service (USDA-ERS). 2024. "Vegetables (potatoes)." *Food Availability (Per-Capita) Data System*. Available online: https://ers.usda.gov/sites/default/files/_laserfiche/DataFiles/50472/potatoes.xlsx?v=95775

U.S. Department of Agriculture Foreign Agricultural Service (USDA-FAS). 2025. *Global Agricultural Trade System Online (GATS)*. Available online: https://apps.fas.usda.gov/GATS/default.aspx

U.S. Department of Agriculture National Agricultural Statistics Service (USDA-NASS). 2025. *Quick Stats*. Available online: https://quickstats.nass.usda.gov/

Valverde, R.A., C.A. Clark, and J.P. Valkonen. 2007. "Viruses and Virus Disease Complexes of Sweetpotato." *Plant Viruses* 1(1):116–126.

Villano, R., H.-S.C. Chang, J. Kewa, and D. Irving. 2016. "Factors Affecting Consumers' Willingness to Pay for Good Quality Sweetpotato in Papúa New Guinea." *Australasian Agribusiness Review* 24:1–17. https://doi.org/10.22004/ag.econ.262479

About the Authors: Kuan-Ming Huang (kmh1169@msstate.edu) is an Assistant Professor with the Department of Agricultural Economics at Mississippi State University. Will Maples (wem87@msstate.edu) is an Associate Professor with the Department of Agricultural Economics at Mississippi State University. Chang Liu (cl2142@mstate.edu) is an Assistant Professor with the Department of Agricultural Science and Plant Protection at Mississippi State University.

Acknowledgments: We would like to thank Taylor Hill, a graduate of the MABM program at Mississippi State University and current Export Sales and Marketing Manager at J. Roland Wood Farms in North Carolina, for her valuable insights into the commercial production processes of US sweetpotatoes. We also thank the editorial team and the anonymous reviewers for their comments that enhanced the quality and readability of the article.