

Teaching and Education Commentary

Re-engaging Traditional Students and Attracting New Talent to Agricultural and Applied Economics Curricula and Agribusiness Careers

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Abstract

Higher education enrollment has been declining, with particularly pronounced decreases among students from rural communities. Broader demographic shifts, declining public funding for higher education, structural inequities, and growing skepticism about the value-added of a college degree have exacerbated decreases in overall enrollment and pose unique challenges for agricultural economics and agribusiness programs. Yet growth opportunities exist, and programs that effectively engage traditional student populations while attracting new talent can play a pivotal role in meeting the tremendous demand for graduates with agricultural degrees in both private industries and the public sector. This commentary summarizes and discusses specific challenges and key recruitment strategies shared during semistructured interviews with representatives of these programs offered across various institutional settings (e.g., privately and publicly funded regional schools, HBCUs, and R1 land-grant universities). Targeted recruitment initiatives, personalized outreach, and digital or social media campaigns featuring students from diverse backgrounds and highlighting well-paid career paths were most frequently described as effective recruitment strategies, regardless of the institutional setting. Programs that maintained or increased their enrollment numbers further report leveraging industry partnerships, creating professional networks, and promoting inclusive and experiential learning opportunities that extend beyond the classroom.

1 Introduction

The US agricultural sector witnessed a 40 percent increase in the total value of production from 2017–2022 and accounted for 5.6 percent of the nation’s gross domestic product. On average, US households allocate 12.9 percent of their budgets to food expenditures.¹ The agricultural and food sector also offers significant employment opportunities, generating 22.1 million jobs, or just over 10 percent of total US employment in 2022 (Kassel 2023; Zahniser and Kassel 2024).

Employment in this sector consists broadly of two groups of workers: (1) low-wage, often seasonally hired workers with little opportunity for professional growth, (2) well-paid, college-educated workers engaged in management, scientific explorations, and policy design and implementation. The impact of technological advancements, immigration policies, and guest worker programs on labor

¹ Notably, only 15.9 percent of these expenditures go directly to farm establishments. The remainder is distributed across 12 agribusiness industry groups, including processing, transportation, finance, advertising, and retail (USDA-NASS 2024).

shortages for the first group of agricultural workers has received increased attention (Charlton et al. 2021; Castillo et al. 2024; Charlton 2024; Smith and Swanson 2024). However, the stark contrast between current enrollment trends in agribusiness programs and higher education more broadly (Baker et al. 2013; Bergtold et al. 2023) and the tremendous demand for college-educated workers with degrees in agricultural economics and related fields is less often discussed (CDFA 2023; White 2023; Strine et al. 2024).

For this commentary, we relied on a convenience sample of 20 semistructured interviews with deans, department chairs, undergraduate program coordinators, and instructors teaching in undergraduate agricultural economics and agribusiness programs at smaller regional universities, HBCUs, or larger land-grant R1 universities. In these interviews, we asked about the size and demographic composition of students, faculty and staff, targeted outreach to select student populations, including historically underrepresented minorities, discussed the effectiveness of current outreach and recruitment efforts pursued, and follow up with questions about diversity, equity, and inclusion (DEI) policies and programs that might have changed over time (see interview guide included in the appendix). We synthesize these responses to discuss challenges experienced and approaches pursued that could provide answers on how to fill the many high-skilled job openings in the finance, food, agriculture, renewable natural resources, and environment fields.

The agricultural sector faces significant challenges, including the need to adopt to extreme weather conditions, water scarcity, soil erosion, and loss of biodiversity; the need to acknowledge and address regional and global inequities; the need to make new and more sustainable production technologies and consumer markets more accessible, all while withstanding and weathering political ideologies and geo-economic conflicts (Delheimer 2020; Hobbs 2020). Shifts in consumer demand toward more sustainable, ethical, and equitably produced value-added products have created new opportunities but also new challenges. The strengthening of local food systems and expansion of agritourism can create new revenue streams and opportunities even for small and medium-sized producers to increase their profitability (Kiesel et al. 2023a; Schmidt et al. 2023). While support for small and medium-sized local producers could increase competition, moving away from large-scale production and forgoing gains from trade more generally could also result in higher prices and increased food insecurity for some populations. Market-driven and policy-led approaches alike will need to be critically evaluated by research that acknowledges efficiency and market power tradeoffs (Alston and Okrent 2017; De Gorter et al. 2022; Halvorson 2023; Kiesel et al. 2023b; Sexton 2025).

A comprehensive understanding of market dynamics and institutions is needed to find solutions that strengthen the resilience of rural and agricultural communities, increase rather than stifle competition, and feed a growing world population. Yet the tremendous demand for well-trained workers equipped to tackle these challenges stands in stark contrast to enrollment trends observed for agricultural economics and agribusiness majors across institutions. Enrollment has been trending downward even prior to the COVID-19 pandemic (Baker et al. 2013). Declining rural population numbers and shifting regional patterns (Cromartie 2017), increased consolidation and concentration in agricultural supply chains (Sexton and Xia 2018), and increased tuition costs (Bergtold et al. 2023) contributed to these observed trends. In addition, the overall decrease in university enrollments, especially among historically overrepresented white students (Mangan 2024), has increased competition for students across institutions. Even Ivy League universities, perceived as a gateway to success, have increased their outreach and recruitment efforts and are increasingly present in rural communities (Nadworny and Marcus 2023).

Many of today's agricultural economics departments and agribusiness programs can be traced back to federal funding and support provided under the Morrill Act of 1862. It created more than 100 land-grant institutions, among them several of today's leading R1 universities, meant to increase access to higher education, teach farming and mechanical skills to rural populations, and conduct publicly useful

research. The Second Morrill Act of 1890 recognized and supported further development of Historically Black Colleges and Universities (HBCUs), primarily located in the southern states as land-grant institutions, increasing access to an agricultural and mechanical arts education for African Americans and Black populations.

Parental income, education, and occupation have long been recognized as important determinants of students' postsecondary pathways and career choices (Jack 2019), and many agribusiness and related programs have relied on name recognition and alumni ties. Apart from HBCUs, these programs traditionally attracted white male students who grew up on a farm or were exposed to the workings of agricultural supply chains from an early age. These students were pursuing higher education to acquire knowledge directly applicable to running family farms and taking over lucrative businesses. For at least some of these students, the monetary and time opportunity costs of pursuing a college degree have become too high, while others have chosen to pursue career paths perceived to offer higher salaries and more opportunities for personal growth. University enrollment of white students is more generally reported to be similar across gender, but more pronounced decreases in male enrollment have been observed in rural regions and agricultural programs (Donadel 2023 Mangan 2024). Women began entering the field of agricultural economics in numbers only in the 1980s (Offutt and McCluskey 2022), and contributions by women are just beginning to be documented.²

Experiences and expectations continue to vary significantly across gender, but also across racial and ethnic backgrounds and socioeconomic status within our discipline (CSMGEP 2021; Kiesel et al. 2021; Ehmke et al. 2022; Offutt and McCluskey 2022). While minority enrollment stabilized or increased at many institutions during the pandemic, many African American/Black, Hispanic/Latinx, and Native American/Alaskan Native/Native Hawaiian/Islander (AHN) and Asian students who grew up in communities comprised of agricultural and food-service workers continue to equate agricultural jobs with hard physical labor and little opportunity for professional growth. The devastating effects of the COVID-19 pandemic, especially among these communities, almost certainly exacerbated student misperceptions that the path to success is to eschew a career in agriculture. Problematic attitudes and practices within the economics profession were highlighted anew during this time (Rosalsky 2020; Tankersley 2020) and likely raised further questions among prospective students from historically underrepresented populations about whether they could find an academic home within our discipline.

Nevertheless, not all agricultural economics and agribusiness programs have seen declines in enrollments over the last decade. Some have reinvented themselves; renamed and added majors, minors, and specializations; and made significant investments in DEI programs or initiatives that contribute to a greater overall sense of belonging and support the success of all students. Agricultural and food industries and consumers stand to benefit from reengaging rural populations and students with agricultural backgrounds in agricultural economics and agribusiness programs. Creating inclusive learning environments that expose all of our students to career paths and leadership opportunities within the agricultural sector has the potential to meet current labor market demands and enrich our discipline. By discussing differences as well as commonalities across institutions and programs and reflecting on which strategies do or do not work in different institutional settings and why, we offer practical advice on how to move forward collectively.

The remainder of the commentary is structured as follows: We begin our discussion with enrollment trends and outreach efforts pursued by smaller regional universities, followed by a discussion of strategies pursued by HBCUs. We then turn to R1 land-grant universities before discussing key

² According to a recent statistic, women now represent 36 percent of all agricultural producers (Nseir 2023); while women are increasingly reported to outnumber men in student populations more generally, women are still underrepresented in agricultural economics and agribusiness majors and economics as an academic discipline (CSMGEP 2021).

findings and initiatives that can attract, engage, and retain new talent in more detail and concluding with final remarks.

2 Student Outreach and Recruitment Strategies at Regional Public and Private Universities

Agribusiness students typically enrolled in regional and private universities have a background in agriculture or come from farming families. Many of these students pursued a higher education degree to acquire knowledge that can be applied on their family farms or businesses and mirroring the demographics of management and leadership in the agricultural sector, these students have been predominantly white and male. Enrollment of this demographic has seen a significant decline—nearly 20 percent—in higher education (Donadel 2023). Regional universities and agricultural programs are increasingly reaching out to and recruiting less-traditional agribusiness students, including AHN students and women from diverse backgrounds as well as students more generally who grew up in rural nonfarming or urban environments and do not have agricultural backgrounds (Appendix Table A1).

Surveying five regional for-profit and four nonprofit institutions revealed a range of recruitment methods employed by agribusiness programs to attract prospective agribusiness students (Appendix Table A2). These include:

- hosting of on-campus contests and special events (i.e., FFA and 4-H program contests/events): engaging students through competitions that highlight their skills and interests in agriculture
- engagement at high school events and trade shows: establishing a presence in local high schools and community events to connect with potential students by hosting a booth
- student outreach: sending current college students to speak at high schools, providing relatable insights into the agribusiness experience
- online and social media marketing: utilizing digital platforms to highlight offerings and opportunities within agricultural programs
- university mailers: sending informational materials directly to prospective students
- tabling at community colleges and college fairs: setting up information booths to engage with students considering transfer options

Among the various recruitment methods (Appendix Table A3), many regional and nonprofit universities identified one-on-one visits with faculty as the most impactful recruitment strategy and factor in a student's decision-making process, and we concur with this assessment.³ The opportunity to have individual conversations and ask personal questions provides prospective students with valuable insights and fosters long-lasting relationships that deepen connections to these agricultural programs.

Campus visits, either scheduled individually or as part of contests or special events such as state or local FFA agribusiness competitions, which often enable these faculty interactions, emerged as the second most effective recruitment tool (Appendix Table A3). Such initiatives allow students to experience the campus environment firsthand and result in learning more about the programs offered while connecting with faculty and peers in meaningful ways.

Some programs further report that letters sent to students who have been accepted but have yet to commit—particularly when these letters come directly from the Dean or the Department Chair—result in higher yields (Appendix Table A3). This personalized approach seems more significant and impactful than standardized, impersonal correspondence.

³ These one-on-one faculty visits can take several forms, including providing an opportunity to talk with faculty at outreach and recruitment events at conferences, fairs, high-schools and community colleges, scheduling appointments at campus visits, and setting up remote (e.g., Zoom or Teams meetings).

Many institutions have faced budget cuts to various programs since the onset of the pandemic, which subsequently constrained recruitment resources. Departments adapted their recruitment strategies, shifting away from traditional mailers to more dynamic online initiatives. Several universities have made significant investments in online promotions, highlighting student internships and industry collaborations, personal experiences, and achievements through social media platforms.

In some interviews, the use of online and social media platforms to highlight the unique offerings of agricultural economics departments and related programs was mentioned as a successful strategy to attract interest and provide prospective students with relevant information. In other instances, it was perceived as not very effective. These somewhat contradictory statements highlight that the content and overall approach to social media messaging and web presence matters. More broadly, an understanding of the distinct demographics of prospective students and more targeted recruitment strategies that actively involve faculty are essential for the effectiveness of recruitment strategies using traditional or new media channels.

Recruitment strategies that have been perceived as less effective overall and came up frequently in our conversations were tabling events at college fairs and community colleges—where staff or students spend an entire day waiting for interested students to ask questions (see Appendix Table A3). Similarly, generic university mailers have not yielded positive results in attracting students to agricultural business programs. Moreover, several university representatives noted challenges in retaining current agribusiness students following a shift from faculty advisors to academic advisors. This transition often results in students having limited opportunities to develop relationships with faculty until their sophomore year, which can hinder their engagement in and satisfaction with the program.

Interviewees also frequently discussed that regional universities often compete with nearby R1 land-grant institutions for prospective students, as documented in Appendix Table A1. Others pointed out that within their institutions, agribusiness programs compete with traditional or general business programs. Students may remain unaware of the existence of agribusiness programs until they enroll in an agricultural economics course. In fact, for many programs, student enrollment in introductory courses taught by their faculty and lectures remains the most effective recruitment strategy to date, as many students enrolled in agricultural economics and agribusiness majors internally switched into these majors after they arrived on campus. Another successful strategy mentioned by some is forming close relationships and strategic partnerships with community colleges and R1 institutions in the region. Doing so augments recruiting efforts for diverse students with and without agricultural backgrounds and/or prior interest in agriculture and can connect students to research opportunities while better preparing them for advanced degrees at R1 universities.

Finally, job openings in other industry sectors that do not require a college degree (e.g., construction, transportation, and the service industry more broadly), coupled with significant increases in tuition and concerns about the long-term financial burden of student loans, likely meant that many prospective students were forced to weigh the decision between incurring debt for higher education or entering the workforce immediately. Several interviewees noted that high tuition was a significant factor in students' decisions not to attend. Furthermore, the independent learning and task completion skills required during the COVID-19 pandemic have had a lingering impact on students who were undecided about returning to the traditional classroom setting (Bergtold et al. 2023; Binkley 2023).

The challenges faced by smaller and less well-known for-profit universities are similar and, in some cases, might be more severe. These universities are in small college towns and surrounding rural communities are intertwined with them (Fischer 2025). Smaller, regional for-profit schools are often less well-known in general compared to other research and teaching institutions in-state and out-of-state and need to invest in broader recruitment and outreach efforts. Those that maintain sizable endowments and continue attracting students usually have more resources available to support individual faculty and students than publicly funded regional schools. Both types of regional schools reported similar strategies,

with one especially successful approach being the recruitment of student-athletes aiming to play in Division II and III college leagues.

Departments and programs within regional universities that experienced a noteworthy increase in enrollments, even amid overall university declines, had strategically widened their appeal by merging or sharing resources with business programs, changing their names, or adding additional majors, minors, or specializations to appeal to students interested in finance, management, and marketing more broadly. Worth mentioning here is that whenever extracurricular activities and programs were discussed, many interviewees mentioned that although women continue to be underrepresented, they are overrepresented in leadership positions and participation in extracurricular activities offered.

In summary, the higher education landscape and enrollment trends for regional schools are undergoing significant transformation, driven by changing demographics and strategic adaptations in recruitment efforts. As institutions continue to navigate these challenges, understanding and responding to these trends will be essential for fostering a diverse and inclusive educational environment.

3 Unique Challenges Faced at Historically Black Colleges and Universities (HBCUs)

HBCUs or 1890 land-grant institutions have experienced a significant decline in enrollment since at least 2010 (Statista 2025), when competition for students traditionally enrolled in HBCUs increased across institutions, including R1 and Ivy League universities. For these institutions, traditional students closely resemble the type of student previously described as nontraditional and the increased focus on diversity, equity, and inclusion at predominantly white, larger, and often better-resourced institutions meant that AHN students who were offered attractive financial aid packages perceived the education offered by these schools as more prestigious or of higher quality, or simply preferred the locations of these schools, did not enroll in the agricultural programs offered at the HBCUs.

Commonly used recruitment strategies are quite similar and typically include in-person campus visits, program promotion through social media platforms/university websites, and the recruitment of undeclared majors or students from other majors within these institutions (Appendix Table A3). Additionally, these strategies often include pathways programs with K–12, two-year community college minority programs, and partnerships with faith-based organizations.

In general, 1890s are challenged by access to a critical mass of teaching faculty, limited research funding, an aging campus infrastructure, and limited ability to offer scholarships and other financial aid assistance. Although the cultural shift reinforced by nationwide protests of police brutality against Black Americans and the rise in the notoriety of HBCU graduates has sparked an increase in enrollment in HBCUs in recent years (Bradley 2024), colleges of agriculture at these institutions are only experiencing modest increases, stagnation in enrollment, or a continuous decline in student numbers. Recruiting Black Americans into undergraduate agricultural programs is still challenging due to the historical connections to slavery, rural-to-urban migration, and the overall still-limited representation of Black Americans in agriculture, especially in leadership positions.

For an additional discussion of both recruitment efforts and challenges experienced by HBCUs, we categorize these institutions by student population size. Tier 1 institutions have 10,000 students or more, Tier 2 institutions have 5,000–9,999, and Tier 3 institutions have fewer than 5,000 students. Effective recruitment is heavily correlated with alumni network reach (i.e., the larger the tier, the greater the alumni network and the greater its reach). Consequently, Tier 3 institutions are continuously forced to identify more innovative strategies outside of existing alumni networks and the commonly used methods of recruitment. Some are adopting strategies already proven successful for R1 and regional 1862 land-grant institutions, including renaming programs and adding certificates to widen the appeal to students interested more broadly in finance and management positions.

Over the past two decades, the federal government has made a concerted effort to increase funding and support for HBCUs. For instance, in commemoration of the 125th Year of the Second Morrill Act, Centers of Excellence were established under the Agricultural Research, Extension, and Education Act of 1998 meant to build additional teaching, research, and outreach capacity among HBCUs (USDA-NIFA 2024a). Since 2020, these institutions have also received a string of minority-serving institutions (MSI) funding (i.e., USDA agricultural scholarship; NEXTGEN), acknowledging and ensuring their continuous contributions to diversity within academia and the agricultural industry (USDA-NIFA 2024b,c). For example, a collaboration between North Carolina A&T State University (NCA&TSU), a Tier 1 1890 land-grant institution, and Fort Valley State University (FVSU), a Tier 3 land-grant institution, was granted funding in June of 2020 by the 1890 Center of Excellence for Student Success and Workforce Development (SSWD). The overarching goal of this collaboration was to increase the number of nontraditional and historically underrepresented minority students that graduate and embark on successful careers in the agribusiness and food industry industries. The project supported the establishment of a two-year academic achievement program educating transfer students about educational opportunities and careers within the agribusiness and food industries. The Transfer Academic Achievement Program (TAAP) program provides transfer students with the opportunity to pursue a BS degree in agribusiness and food industry management (NCA&TSU) or a BS degree in agricultural economics (FVSU) and to enhance their academic preparation, workforce development and readiness, and professional soft skills development; this formalized program further supports matriculation at a four-year academic institution. One of the particularly attractive features of this program is the study abroad opportunities; industry, federal, and nongovernmental internships; and assistance with applying to graduate programs.

In addition to institutional and cross-campus partnerships, partnering organizations such as the Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) program have been instrumental in pipelining minority and underrepresented student populations into the agricultural and related sciences. MANRRS offers workforce development training and industry and governmental engagement with Junior MANRRS chapters serving as the recruitment pathway for high school students into the university chapters and from there into national organizations and the agricultural industry. MANRRS continues to be instrumental in forging academic, governmental, nongovernmental, and industry partnerships that seek to recruit and retain diverse talent within the agricultural sciences, including the agricultural and applied economics profession (MANRRS 2024).

In summary, many 1890 land-grant colleges of agriculture faced two primary challenges in student recruitment: limited resources and historical factors, such as African American students' associations of agriculture with slavery and infrastructure issues. Inadequate state funding exacerbates the resource limitations. As a result, these institutions continue to depend heavily on traditional recruitment strategies like campus visits, legacy ties, and name recognition.

4 Restructuring and Recruitment Efforts at 1862 Research 1 Land-Grant Universities

The remainder of our interviews were conducted with department chairs, undergraduate program coordinators, and faculty from agricultural economics departments at R1 institutions. Compared to the smaller regional universities and HBCUs previously discussed, R1 land-grant institutions are often the flagship institutions within their states and serve a greater number of students. Many of these departments are based in agricultural colleges that offer a wide range of majors. Some of these departments also manage multiple majors, provide specializations, and offer preparatory classes for certificate programs (e.g., accounting). Students at R1s may also choose to enroll in general economics

majors offered by economic departments, often housed in different colleges, or business majors offered by professional business schools associated with these universities.

Agribusiness and related undergraduate majors housed in these departments often ensure funding for MS and PhD programs administered by these same departments. Reduced undergraduate enrollment in these programs therefore also has immediate and direct consequences for the size of graduate programs and research capacities of these departments. Reductions in the number of applicants and uncertainty about future funding streams have already resulted in smaller cohort sizes and, in some cases, discontinued graduate programs. MS programs have seen the largest decrease in enrollments; without funding commitments, these programs may not be able to compete with newly emerging pre-doc positions.

While undergraduate enrollment at R1 institutions has decreased, it has decreased relatively less than enrollment at smaller regional schools and HBCUs. We also detected significant variation in enrollment trends across programs, with some programs reporting stable and even increasing enrollment observed over the last 10 years. Nevertheless, all interviewees confirmed changes in the demographic composition of the students at these institutions. As already discussed in the context of regional schools, past students enrolled in these programs often had farming or agricultural backgrounds, grew up in rural areas, and mostly identified as white and male. These schools and programs also recruited students from within their respective states. While many of the interviewees stated that they do not believe they directly compete with other R1 universities in other states for undergraduate enrollment, many reported increases in the share of international students enrolled, with the largest share of these students coming from Asian countries.⁴ In California and elsewhere, R1 universities are also increasingly admitting students with Hispanic backgrounds, and some have recently received Hispanic-serving institution (HSI) status. For schools located closer to urban areas, significant and widening rural versus nonrural enrollment gaps were reported. Rural students with high socioeconomic status (SES) have been reported to enroll at similar rates to urban students with the same SES, while enrollment of low and medium SES students has decreased (Jaschik 2021, Wells et al. 2023). Overall, fewer students with agricultural backgrounds enroll at these institutions, and the students who took their place often had limited exposure to career paths in the agricultural sector or were primarily familiar with low-paying and seasonal jobs.

Many interviewees mentioned that they compete for undergraduate students with other campus majors rather than other institutions. In fact, we repeatedly heard that a large share of agribusiness majors (more than 50 percent in some cases) are internal changes of majors from other STEM disciplines or students who chose agribusiness majors because of binding capacity constraints for general business programs. Some mentioned that the rigid chemistry or physics requirements of other STEM majors motivate students to change their major, while others believed that students switch after exposure to class offerings and, in some cases, extracurricular activities or broader career advising that highlight possible career paths in industry, government, and academia. Yet others report that students find certificate programs, specializations, or minors offered attractive and decide to pursue these in addition to their initially chosen majors.

Consolidation, adding and/or renaming of programs, degrees, and specializations could be viewed as the most effective recruitment strategies to date if one purely considers the size of programs. Examples of added or renamed programs and degrees offered by agricultural economics departments include a BS in Financial Planning at Texas A&M, a BS in Applied Economics and Management (with an

⁴ Several schools now have binding enrollment caps in place for international students.

offered minor in food and agricultural business) at Cornell, and a BS in Managerial Economics (with a kept specialization in Agribusiness Economics) at UC Davis.⁵

However, these recruitment strategies are not without challenges, as discussed by several of the interviewees. A common sentiment expressed by our interviewees was that many of our current undergraduate students do not know what agricultural economists do. The disconnects between student expectations, program offerings, and faculty expertise might not be resolved in programs with a more general business orientation.

While students who are already aware of these agribusiness or agricultural economics programs still find these programs, especially those that rank highly and offer excellent industry connections and network opportunities, students unfamiliar with these programs might not readily connect their desire to find employment in the agricultural sector or their interest in food systems with these programs or degrees offered.

When asked about recruitment efforts more specifically, many pointed to organizational changes at the college or university level that have occurred over the last few years. Much of the outreach and recruitment for these programs is now done at the college or university level, and faculty are involved in these efforts only in limited capacities and on a voluntary basis (see Appendix Table A2). Student advising is increasingly done by staff advisors (rather than faculty), many of which serve more than one department or major. These shifts toward more centralized advising were consistently rated as ineffective or even detrimental to maintaining stable enrollment. Additionally, centralized outreach and recruitment efforts were rated as unsuccessful, limiting the department's ability to attract students with an interest in agricultural markets and policy design. Messages communicated in university mailers, social media posts, and, in some cases, virtual events rarely focus on job opportunities in the agricultural sector or research careers, at least partially due to the fact that the level of awareness of the type of research agricultural economists do and what career paths can be pursued in agriculture is limited among staff advisors and university staff recruiters. Even when highly motivated to support students, staff might therefore be less effective than faculty in attracting new talent to the discipline.

Only some department chairs, undergraduate program coordinators, and individual faculty we interviewed mentioned recruitment efforts at the program level. Some mentioned tabling and continued participation in youth events and collaborations with organizations such as 4-H and FFA. These more targeted efforts (compared to college fairs, etc.) are generally viewed as effective or working well (see Appendix Table A2). They not only attract students with farming backgrounds but also students who were exposed to or joined these organizations and programs through friends. These efforts are viewed as especially effective when combined with opportunities to visit and explore campus and a chance to talk to students and meet with faculty or extension specialists for career advice. Some programs further reported that promoting agribusiness majors in high-school classrooms comprised of students with agricultural backgrounds is also working, especially when faculty or alumni share their experiences and highlight job opportunities, average salaries, growth potential, and leadership opportunities. Following up with students who were admitted is further perceived to reinforce these recruitment efforts effectively. One interviewee mentioned that a reminder postcard sent to high schoolers who have been accepted but were undecided significantly increased yield.

Others reported that their outreach efforts to high school programs suffered from low student participation, and almost all interviewees discussed the need to look for additional or different ways to attract new talent and that business schools on or off campus more effectively attract students. To increase their reach and more effectively compete with these programs, one school modified its youth

⁵ The Charles H. Dyson School of Applied Economics and Management (Dyson School) at Cornell evolved from the Department of Agricultural Economics. It serves as an additional example of restructuring and renaming efforts of programs that historically focused on agriculture and broadened their scope over time.

competitions to be less agribusiness-specific (i.e., business plan competition) and moved toward promoting more broadly understood business skills (e.g., market innovation, management, marketing). Providing training for high-school educators on how to implement these competitions and make them more broadly appealing was mentioned as key to the success of these efforts. Another program shared ongoing collaborations and modifications of how to connect agribusiness to traditional agricultural science questions, such as adding a cost component to an experiment of feed types conducted in the animal science department.

Several programs also shared that a large share of their students transfer from two-year institutions and discussed collaborations with community colleges, especially those in more rural and agricultural production areas as effective recruitment strategies. These partnerships or collaborations were often discussed as part of their department's broader DEI efforts. Depending on location and funding requirements, these efforts, largely focused on the recruitment and support of AHN students, have been reframed, renamed, or—in some cases—discontinued. In some of these conversations, the need for continuous exposure to and engagement with research, career path exploration, and targeted support for less well-resourced student populations came up. Especially for first-generation students, financial and information constraints coupled with unique personal challenges continue to hinder academic and professional success. Furthermore, the still-limited representation of AHN populations in higher education and leadership in the agricultural sector can reinforce the common misperception that the key to success is to eschew careers in agriculture (see Appendix Table A1).

Very few comprehensive outreach and support programs developed or operating at the department level currently exist. The Diversity and Inclusion in Research, Education and Career Training (DIRECT) program implemented in the Agricultural and Resource Economics Department at UC Davis is a notable exception. Acknowledging possible biases prevalent within our discipline and using insights gained from a critical analysis of student data, it expanded existing efforts within the department to prepare diverse student populations for a wide variety of successful career paths. Several program components expose to and involve undergraduate students in research and connect prospective and current undergraduate and graduate students, as well as faculty via multilevel mentee-mentor networks. Early outreach and continuous encouragement ensure the academic and professional success of its participants. Finally, success stories are shared via the program website and other social networks and media channels to attract future participants. As such, the DIRECT program not only offers much-needed financial support but also aims at addressing information barriers and unequal access to support networks and resources among currently underrepresented student populations.

In summary, many departments and programs discussed the need to develop more effective recruitment efforts and outreach to both traditional and nontraditional students. Some discussed ways to increase outreach to students within their states, including broadening the appeal to students without agricultural backgrounds or an interest in agriculture per se by framing their programs as food systems, sustainability, or policy majors. Others favored reframing their majors as general business, finance or marketing majors, or attracting students from out of state based on their alumni reputation.⁶ Many also mentioned advertising concrete and well-paid career opportunities post-graduation.

Similar to what we described for smaller regional universities and HBCUs, bringing students to campus, connecting prospective students with current students but also allowing them to interact with faculty were strategies that were perceived as effective. Finally, the need for increased online and social media presence was frequently discussed, and many voiced frustrations about the ineffectiveness of recruitment done at the college or university level.

⁶ Although Purdue was not included in our interviews, Purdue's China Program in Agribusiness Management (<https://ag.purdue.edu/department/agecon/international-programs/purdue-china-agbiz.html>) is a prominent example of the latter.

5 Similarities and Differences across Institutions and Possible Ways Forward

Limited public funding and increased financial pressures experienced by both public and private universities, coupled with broader demographic changes, a growing skepticism about the value proposition of higher education more generally, and the return on investment or value-added of specific degrees will continue to result in college closures in the coming years. Although several small liberal arts schools have announced their closure since the COVID-19 pandemic, reductions in enrollment continue to be more pronounced at public compared to private schools, and recent reports show a significant decline in enrollment of first-generation, lower SES students at four-year colleges, especially at more competitive and higher-ranked R1 institutions (NSCRC 2024).⁷ Disengagement and significant decreases in enrollments of white students who grew up in rural communities and identify as male—demographic descriptors also often used to characterize traditional student populations enrolled in undergraduate agribusiness majors and related programs—have further been the focus of more recent reports (Donadel 2023; Wells et al. 2023; Mangan 2024). More generally, the economics profession continues to be home to disproportionately few historically underrepresented minorities and women.⁸

The extent of experienced declines in enrollment varies somewhat across geographic regions and specific locations but also depends on courses offered, overall curriculum design, and, in some cases, program names. There continues to be a lack of awareness and understanding of what agribusiness majors teach and what one can do with these degrees, despite well-documented and impactful research opportunities and meaningful career paths, good starting salaries, and potential for upward mobility. Although the pandemic might have exacerbated misperceptions by students, these challenges are not necessarily new and have been documented and discussed in the literature even prior to the pandemic (e.g., Gillespie and Bampasidou 2018).

Agricultural economics and agribusiness programs do not just face unique challenges in this current, admittedly difficult environment for higher education, however. Recent reports analyzing disaggregated data suggest that enrollment in community colleges has increased, with notable growth in enrollment in mechanic and technologies/technician courses and programs, undergraduate certificate and associate degree programs, and multi- and interdisciplinary studies with clearly defined career paths in social and clinical sciences (NSCRC 2024). Coupled with the tremendous demand for college graduates in the agricultural and food sector and our disciplines applied research focus that addresses many of today's pressing challenges, these trends present agricultural economics and agribusiness programs with the opportunity to communicate a meaningful value proposition to students with diverse interests and backgrounds.

Key to the long-term viability of agribusiness majors and research excellence of agricultural economics departments is the development of recruitment strategies and programs that foster a more inclusive and supportive learning environment. Historically underrepresented populations need not just be welcomed into our discipline; they also need to be supported and mentored throughout their academic careers. DEI initiatives cannot rely solely on commitment and support offered by individual faculty members. Additional federal and state funding, as well as industry sponsorships, will be needed to institutionalize them. HBCUs and smaller regional schools may be able to support a more diverse set of students better than larger and better-known R1 institutions, although some of the larger R1 institutions,

⁷ Freshman enrollment at public and private nonprofit four-year institutions was reported to be down 8.5 percent and 6.5 percent, respectively, in Fall 2024 (NSCRC 2024).

⁸ AHN populations earned a smaller share of economics degrees than other STEM degrees at all degree levels, and only 31.0 percent of economics degrees were conferred to women. AHN populations and women continue to be underrepresented among faculty as well (AEA 2021). Similarly comprehensive data for agricultural economics departments and agribusiness degrees is currently not available, but our interviews confirmed these documented broader trends.

especially those in or near urban centers, may attract a more diverse set of students. They can allow students to stay closer to home, offer smaller class sizes and a more individualized approach, and help students to overcome preconceived notions about the lack of career opportunities or professional growth within the sector. In fact, our interviews suggest that many of the agribusiness programs offered at these regional schools maintain impressive job placement rates of 85–90 percent prior to graduation.

Publicizing their success via personalized outreach continues to be the most effective strategy identified by all universities interviewed, as it builds trust and rapport with prospective students. Faculty interactions during campus visits and one-on-one in-person or virtual meetings further offer an invaluable opportunity to inspire students who may be less familiar with attractive career paths in agriculture and related fields, including academic research and faculty positions.

Effectively leveraging digital platforms can serve as a powerful tool to extend the reach of recruitment efforts of programs and appeal to a tech-savvy, digitally connected generation of students. Social media campaigns, engaging websites, and targeted online advertising can help highlight opportunities within agribusiness programs. The sharing of success stories from current students or alumni, as well as collaborations across institutions, industry internships, and research opportunities can help prospective students see the potential real-world impacts of their pursued education.

Collaborations with national organizations and existing pipeline programs consistently funded by industry—such as 4-H, FFA, and MANNRS—can provide valuable learning opportunities for students and simultaneously serve as an effective recruitment tool that supports a multitude of institutions. Improving pathways to academic success of community college students transferring to four-year institutions can further allow programs to diversify their student populations, especially if they ensure that prospective students strengthen their analytical and mathematical foundations. Coupled with additional mentoring initiatives developed by our professional associations, these programs can give students access to professional networks and leadership opportunities that extend beyond their institutions.

Our interviews further indicate that several R1 institutions have been restructuring or renaming their undergraduate programs. These efforts can be interpreted both as a broadening of outreach and an acknowledgment that less than 20 percent of the value generated by the agricultural sector can be directly linked to farming operations. While name changes that emphasize general business skills allowed maintaining enrollment numbers and, in some cases, increased enrollment, our interviewees discussed gaps and disconnects between student expectations and faculty expertise.

Updated curricula could benefit recruitment efforts by emphasizing theoretical foundations of markets (including financial markets), operations, and business management; marketing at all levels of the supply chains; and advanced data management and analysis skills. However, it will be important to maintain an agricultural economics identity and expose students to relevant research in our field as well as career paths in industry, government, and academia. The use of examples and case studies that discuss production of agricultural commodities, food consumption, regional food systems but also international trade and modern retail markets could bridge these gaps while bringing theoretical and math-heavy content to life.

One group of prospective students, our discipline could more effectively recruit across institutions, are students with a strong interest in addressing pressing global challenges like sustainability, food security, and economic disparities via market innovations and policy design. Many of these students are initially attracted to other STEM disciplines, public policy programs, or agricultural majors, although some find their way into agribusiness and related programs via internal changes in majors. The large share of internal changes in major reported across programs suggests untapped potential to attract these students into our majors earlier. Early exposure to and involvement in applied research can attract these students and simultaneously enrich the perspectives represented in agricultural economics research.

6 Concluding Remarks

Enrollment in universities has been declining for more than a decade, sparking discussions about the future of higher education. Throughout this commentary, we argue that our discipline not only faces unique challenges ranging from severe funding cuts to structural and institutional changes that might have reduced rather than reinforced targeted outreach to select student populations; agricultural economics and agribusiness programs also have unique opportunities to communicate a meaningful value proposition to a diverse group of prospective students. A strong emphasis on inclusive excellence, coupled with effective outreach that highlights industry trends and policy-relevant research but also multifaceted career paths and leadership opportunities, can be a successful recruitment strategy. Efforts to reengage both traditional and historically underrepresented student populations will only be effective if we find ways to design and implement comprehensive student support programs. A renewed commitment to and continuous public and private funding for programs with a strong emphasis on student learning and sense of belonging for all students, including first-generation and low-income students from diverse racial and cultural backgrounds and with unique gender identities, will be essential to maintaining research excellence and relevance and the future of our discipline more broadly.

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Appendix. Summary Data from Questions Asked Each University

Table A1. Targeting Student Groups

Type of University	FFA/4-H	Homeschool	Transfer Student	In-State	Out-of-State	International	AHN
Land grant	6		1	7	1		
1890 HBCU							1
Regional	3		1				
Private nonprofit	1	1	2		1	1	

Notes: Universities can select more than one target group.

Table A2. Recruiting Responsibilities

Type of University	University Level	College Level	Department Level
Land grant	9	9	3
1890 HBCU	1		
Regional	2	4	2
Private nonprofit	2	2	2

Notes: Some universities use several levels for recruitment.

Table A3. Top Most Effective and Least Effective Methods

Methods	Visit Days	Talk with Faculty	FFA/4-H Events	Social Media	Tabling	Mailers	Other Events	Talk to Parents
Most effective	2	7	4	1		2	1	2
Least effective	1		2	1	4	4	2	

Notes: Each university could choose all the methods that they thought were the most or least effective.

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