NDSU NORTH DAKOTA STATE UNIVERSITY

AGRIBUSINESS AND APPLIED ECONOMICS

STATE BOARD OF AGRICULTURAL RESEARCH AND EXTENSION

Dr. William Nganje, Chair; December 11th, 2025

i. Appreciations, Accomplishments, and Impacts

- GRA Funding from 2015-2017 legislature: Well-balanced Graduate Program with Domestic Students: Our graduate program provides stakeholder R&D with about 40 graduate students, multiplying SBARE graduate student support by more than 10X.
- Collaboration with Stakeholders: Engaging stakeholders through five cutting-edge research centers (Center for Trading and Risks, Agricultural Risk Policy Center, BIOEPIC, CAPTS, and Burdick Center for Cooperatives) with significant endowments and operating funds of approximately $28 million, generating 19 FTEs, and more than $100,000 in scholarships and 10 graduate Research Assistantships.
- Fueling Research Excellence and Global Recognition: Ranked among the leading Applied Economics Departments worldwide, with several nationally award-winning faculty members, ranking 12th in research expenditures in the nation.
- Driving Demand-side Research Innovation: All research faculty lead Federal Hatch projects and publish top journal articles, significantly above the national average and some R1 peers.
- Home of the ND Tax and Farm Models: Serving the state Tax Department and stakeholder groups.
- Empowering Industry Professionals and Stakeholder Groups: Hosting three extension conferences on Crop Outlook, Insurance, and Ag Lenders at multiple locations with hundreds in attendance from the state and region.
- Building a Strong Future: Active fundraising and collaboration with stakeholders. We have quickly become one of the nation's envied applied economics programs. Recruited top-ranked faculty from multiple top institutions.
- **Continued excellence will depend on strong operating funding support for the department and our Research Centers.**

ii. OPPORTUNITIES TO INCREASE RESEARCH IMPACTS

A. CENTER FOR AGRICULTURAL POLICY & TRADE STUDIES (CAPTS): POLICY, MARKETS & IMPACT ANALYSIS PROGRAM

Ask: Operating support (Policy; Markets & Trade; and Economic Impact Research) + data/software pipelines + outreach delivery.

Need: ND producers and agencies face fast policy, market, energy, logistics, and trade shocks; ND lacks a standing, rapid response unit that converts national/global shifts into ND-specific price/basis/margin, policy advice, and economic impact guidance.

Why now: Establishes ND's analytics backbone in time for upcoming policy/market cycles and provides shared data/tools that the Center will immediately leverage.

Value and Impacts: Decision-ready analysis in weeks, not months; market/policy dashboards used by producers and agencies; clearer signals on basis, storage, freight, and program choices; credible impact and contribution analysis for legislators; workforce trained on ND problems.

Deliverables & metrics (Yr 1–2): ≥12 policy/market briefs & 4 impact and contribution notes/year; ≥18 workshops statewide; public dashboards for policy/market indicators and county/sector contribution; documented use by agencies/legislators; producer adoption metrics from event surveys; external leverage via contracts/grants.

B. REVITALIZING NORTH DAKOTA DAIRY INDUSTRY

Ask: Operating support data/software pipelines, outreach delivery, and graduate research assistant.

Need: The North Dakota dairy industry is at a critical inflection point, following a severe and steady four-decade decline that has seen its farm count collapse from over 1,800 in 1987 to just 18 in October 2025 (The Bullvine, 2025; NDDA, 2025).
Why now: A vibrant dairy industry is critical to North Dakota's economy, extending far beyond the food supply or job creation. For the state's corn and soybean sectors primarily, the dairy industry provides a stable, local, year-round market, offering them a crucial buffer against the volatility and risks of relying heavily on exports. However, the imminent arrival of a large-scale industrial operator in Abercrombie creates a central economic conflict, pitting the opportunity to revitalize the state's diminished dairy sector against the existential challenge it poses to North Dakota's few remaining legacy farms. Small dairy farms cannot compete on volume or price against operators of this scale (MacDonald, 2020). The state must therefore strike a balance between the economic benefits of such expansion and the costs of further consolidation, which stifles competition. Research is urgently needed to evaluate these opportunities and challenges.
Value and Impacts: The goal of this ongoing research is to identify and model strategic pathways to revitalize and expand North Dakota's dairy industry. This research will develop a framework designed to support both existing producers and attract new investment, ultimately maximizing the sector's economic contribution to the state.
Deliverables: i) quantify the economic and logistical concerns of existing North Dakota dairy producers regarding the new large-scale market entrant, ii) model the supply chain and market impact of the new entrant on local input costs and logistical networks, iii) analyze the impacts of large-scale dairy operations on water and air quality, and identify mitigation strategies, and iv) identify and evaluate the *feasibility* of alternative, high-margin business models for small farms, drawing on successful strategies from other regions/states.

iii. OPPORTUNITIES TO IMPROVE EXTENSION IMPACTS

A. AGRICULTURAL LAW & TRANSITION PLANNING

Ask: Operating support; data/software, training, part-time support.

Need: Large intergenerational transfer of ND ag assets; without plans, families face avoidable taxes, probate delays, conflict, and forced sales; demand for neutral, research-based, statewide guidance exceeds capacity.

Why now: Transitions are accelerating amid volatile rates, evolving tax rules, and record land values; closing the capacity gap before the next planning/tax seasons prevents avoidable losses and forced sales.

Value: Preserve farms/ranches as local, family-owned operations; reduce tax leakage and forced sales; facilitate faster, more transparent family decision-making; and provide county-level visibility on transition risk for lenders and local leaders.

Program (delivery): Expand Design Your Succession Plan with standardized curricula and checklists; Transition Risk Dashboard (age structure, acres at risk, entities, valuations); public toolkit (entity selector; buy–sell scaffolds; tax-timing calculators); clinics with lenders/attorneys/accountants; rapid notes on legal/tax changes.

Metrics (Yr 1–2): ≥20 DYSP events + ≥12 clinics/year; ~900 producers reached/year; ≥350 families complete/update written plans; 6 concise briefs/year; courses/practicums; supervise 2 GAs.

B. PRODUCTION RISK MANAGEMENT

What's funded: Operating support for insurance optimization & hedging; student support; data/software.

Need: Persistent production/price volatility; evolving program rules (MPCI, SCO/ECO, PRF; LRP/DRP/LGM); uneven adoption; producers need neutral, tool-based guidance tied to ND yield/basis realities.

Why now: Elevated weather and price risk, plus ongoing program updates, make the upcoming enrollment and hedging windows pivotal; producers need support ahead of 2026 planning to protect cash flow.

Value: Protect working capital; reduce downside while preserving upside; more consistent, documented coverage/hedge choices; lender confidence via standardized plans.

Program (delivery): Statewide Risk Management Academy with decision tools and seasonal clinics; tools hub (coverage ROI calculators; LRP/DRP breakeven timing; hedge-floor planners; margin/collateral checklists); rapid program-change notes.

Deliverable Metrics (Yr 1–2): ≥20 Academy events + ≥12 clinics/year; ≥1,000 producers reached; ≥400 farms/ranches implement coverage or hedging changes; 6 briefs/year; supervise 2 GAs.