

Senate Appropriations  
Committee Testimony  
Northern Crops Institute  
Mark Jirik, Director  
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The Northern Crops Institute is a government agency, written into Century Code in 1981, whose mission is to grow markets for crops grown on the northern plains, and based on the campus of NDSU. Our founders and legislative leaders understood that crops and crop quality don't end at state borders.

Sometimes, it is hard to think about how much has changed in 40 years. 40 years ago, the primary mission of NCI was supporting the wheat and barley industry. Today, we continue our work in wheat and barley, but are actively engaged in promoting soybeans, corn, pulse crops – and the wide array of crops grown throughout this region for both food and feed uses.

There are three main areas that I would like to cover for you today, first is an overview of who we are and what value we bring to the state, second, I'd like to highlight some changes over the last biennium and since our strategy was rolled out four years ago, and finally a look at our challenges and opportunities over the next two years.

Our institute, and its strategy, is directed by the Northern Crops Council, a council made up primarily of farmer leaders, but also business leaders and the North Dakota Commissioner of Agriculture, General Manager of the North Dakota Mill and Elevator, and the President of NDSU or his designee.

Our staff at NCI is made up of a number of a wide range of people with experience in food and feed science, education, and industry experience.

NCI promotes use of crops grown in this region in a number of ways including short courses that are offered in person, hybrid, online, and on demand for international grain buyers. Hosting trade teams with our commodity group partners and speaking to international and domestic audiences highlighting the value of crops grown in this region. Hosting webinars hosting a wide range of topics from market updates to cereal grains to ethanol.

Most of our international buyers come to us through our partners at US Wheat Associates, US Grain Council, US Soy Export Council, and other international crop promotion partners. Their funding comes from both federal dollars, as well as state check off dollars with support from the state level commodity groups.

From a program standpoint, the last biennium continued to be one of change. Due to the pandemic, the first year continued to be predominated online programs, the second year that shifted to a combination of both online and in person.

The pandemic will forever change how NCI operates. The online courses will not go away. We've found it is a way to reach a different audience. Usually more junior employees at companies overseas, or from countries where travel to the US is especially difficult.

In 2021 we conducted our first value survey, looking at the value that our institute brings to the region as far as growth in exports and investment in the region. At that time, we looked at our in person courses in 2018 and 2019, which were all in person.

We just concluded our analysis for 2020 and 2021, where we were all on line courses, and we expected to see a drop off in results. Two years ago, 95% of our course attendees reported greater confidence in supply chains as a result of attending our courses – this year it was 87%. Two years ago 99% said they had a better understanding of crop quality as a result of our courses, this year it dropped to 97%. Two years ago, 51% reported increasing the volume purchased of US commodities as a result of our short courses – this year, it actually increased to 56%.

The NCI team did an excellent job of shifting how we conduct our courses – conducting online education is very different than conducting in person, how we engage, how we track, and how we present courses takes completely different processes. The team engaged with experts, learned through trial and error, and never gave up.

In addition to short courses, we also host a wide number of webinars, which are free and open to the public on a wide range of subjects. Our ongoing webinar series are “Market Update” which broadcast twice a month. Cereal Innovators, Future of Feeding, and Everything Ethanol, all happen once a month. In addition, we've worked with a number of partners on shorter term webinar series on specific topics for specific international geographies.

Our second handbook was released last year, “Ancient Grains of the Great Plains” and our third will be released in the coming weeks, “Guide to Wheat Quality.” With two more in the works. These are technical handbooks, designed for business and industry to learn how to better utilize crops from this region.

NCI also host our first two conferences in 2022. NCI's Ancient Grains Conference was in Elk River, MN at the historic Oliver Kelley Farm focused on building markets for ancient and specialty grains producers. Our “Next Five Years” conference was focused on helping the industry look at what are the major items to watch in our markets over the next five years.

In addition to these programs, we also conduct technical services for companies that are looking to use crops grown in the region for their products. In the last 5 years, we have dealt with about 150 entities – ranging from entrepreneurs, public entities and private businesses on over 400 projects. About 40% of them have investments in North Dakota – all of them were looking at increasing usage of crops grown in this region. These services range from testing, to milling, pasta production, snack food production or feed milling. These services are generally confidential in nature. But it is a way or putting our equipment to work for the state of North Dakota and the companies that use the commodities grown here.

From a technical service standpoint, we only surveyed those clients that were private companies working on projects in 2020-21, again, looking at the impact after the fact. On average, the overall investment in the region has increased 24%.

That gives you a little bit of background on who we are today, and what we've done, I'd like to take a look at how NCI has changed from the last biennium, and since the start of implementing our strategic plan.

In early 2019, the Northern Crops Council met in Mandan and discussed a new strategic direction for the Northern Crops Institute. The plan called for intensifying the focus on our overall mission and making sure we were true to all the priorities laid out in the North Dakota Century Code. It was a strategic plan that laid out a vision of growth allowing NCI to reach its full potential.

I am thankful to the Northern Crops Council for their vision and leadership in laying out this framework. And equal credit needs to go with the dedicate staff at NCI for carrying out the mission and living that strategy every day.

From prior to the strategic plan to today, NCI is conducting four times the number of short courses.

From prior to the strategic plan to today, NCI has doubled the number of clients that we work with in an average year.

From prior to the strategic plan to today, NCI is doing more than two times the number of projects.

Prior to the strategic plan, 75% of NCI's budget came from appropriations and 25% came from special funds, today that has reversed itself, with 25% of NCI's projected budget this year coming from appropriations and 75% from special funds.

Prior to the strategic plan, NCI had never conducted a webinar. In 2022, NCI hosted 57 webinars with over 2500 attendees.

Prior to the strategic plan, NCI had never conducted a conference, in 2022, NCI hosted two well attended and highly rated conferences.

Prior to the strategic plan, NCI had never released a handbook, today, there are two NCI handbooks available, one in final proofing, two being written, and another 12 titles that are in the early stages.

From the last biennium to this biennium, NCI is forecasted to double overall attendance at events.

From the last biennium to this biennium, NCI is forecasted to doubled technical service projects.

From the last biennium to this biennium, NCI is forecasted to almost double our special funds income.

Four years into our strategic plan, and NCI is well on track to achieving its strategic objectives. This biennium has been marked by some key challenges, especially the pandemic, and the NCI staff has done a tremendous job of not stumbling, but turning those challenges into stepping stones.

Finally, I'd like to look at some of the challenges and opportunities facing us in the coming biennium.

First: Livestock and feed market development. NCI has always been involved in helping develop feed markets worldwide. The majority of the crops we produce, or their byproducts, are used in the feed industry. We've been growing our activity over the last biennium in our work in growing markets for the feedstuffs produced in this region, and that activity is only expected to increase the coming year.

For the last thirty-three years, NCI has run the NCI feed center on the campus of NDSU. This facility makes feed for the NDSU farms, but also is used as a training center for international feed mills, trade teams, as well as for domestic market participants.

The feed center is also used for conducting quality studies and analysis, some on our own, some in conjunction with our university partners at NDSU and other land grants around the country. Today, we are working on five ongoing projects related to feedstuffs from the region.

The most publicized study is an ongoing study looking at the quality of US corn versus our competitors in Argentina, Brazil, and Ukraine. International buyers criticize US corn as breaking up easier and arriving in poorer shape than our competitors. What we've found is while our corn is different and it does break up easier – it is also less costly to mill, and thanks to our partners at SDSU and Auburn, appears to be more digestible and creates a better feed. Essentially turning something that overseas buyers would like to discount us for, into an asset.

There are an additional six projects being discussed that would be run through the feed mill.

The challenge is, the feed mill has a number of problems.

Our pellet mill was installed as a used piece of equipment, and is now approaching 70 years old. Parts are no longer being manufactured for it, and it is at risk of critical failure.

Our ingredient bins have major structural issues, and while they have been maintained and patched, there are no longer places to apply patches to, some of those bins will need to be taken out of service in the near future as they are in danger of critical failure. In addition, today we have four ingredient bins. When the mill was built in 1990, we didn't have the number of feedstuffs available in the region today and bulk storage for projects is a major issue.

Our warehouse was not designed for the number of projects that are ongoing – our corn study had us unload a fifteen-ton container of corn in 60lb bags – we had pallets of corn stored throughout the feed mill. As we increase the number of projects, there will be no place to effectively store any bagged or palleted material.

There is equipment that is on long term loan to us, that is in storage and needs to be taken up and set up as needed as there is no place to install in the current mill.

To access the state-of-the-art auditorium at the feed mill, our course participants and visitors need to enter the feed mill and take stairs open to the equipment and dust.

The auditorium is on the second floor of the feed mill, and is not handicap accessible.

There are not proper places to do hands on training and analysis. Today, we are using a converted storage room for serving meals and doing training not fit for the auditorium.

Finally, our parking lot is Red River clay – and any work or visitors in the spring or fall are discouraged by a muddy mess. Any trucks or containers risk having to be pulled or hoisted away from the mill.

The governor's budget recommended \$3.9 million in onetime funding from the Strategic Investment fund for feed mill upgrades. We would very much appreciate this funding.

Our second major challenge continues to be with staffing, we've struggled to fill open positions over the last biennium and remain competitive in the market place with our current staff. The state need to continue to have a good compensation plan, and we appreciate the Governor Burgum's recommendations on compensation plans.

Finally, our greatest opportunity over the next biennium will be successfully transitioning to our new home at the Peltier Complex. This investment by the state of North Dakota and our partners will provide the opportunity for NCI to continue to focus on growing markets and adding value for the northern plains.

While we have no request for additional appropriations beyond the normal funding and salary increases, I would like to point out that as we've moved our special funding from 25% to 75% of budget, it does get complicated as some of our grants having matching requirements and limit what they cover. For the last two biennium, we've said we would find the funding to grow outside of appropriated funding. In two year's time, we might reach the maximum of what we are capable of.

Thank you for your continued support of the Northern Crops Institute.