U.S. Hard Red Spring and Durum Trends / Strengths / Challenges





Jim Peterson

Policy & Marketing Director

North Dakota Wheat Commission

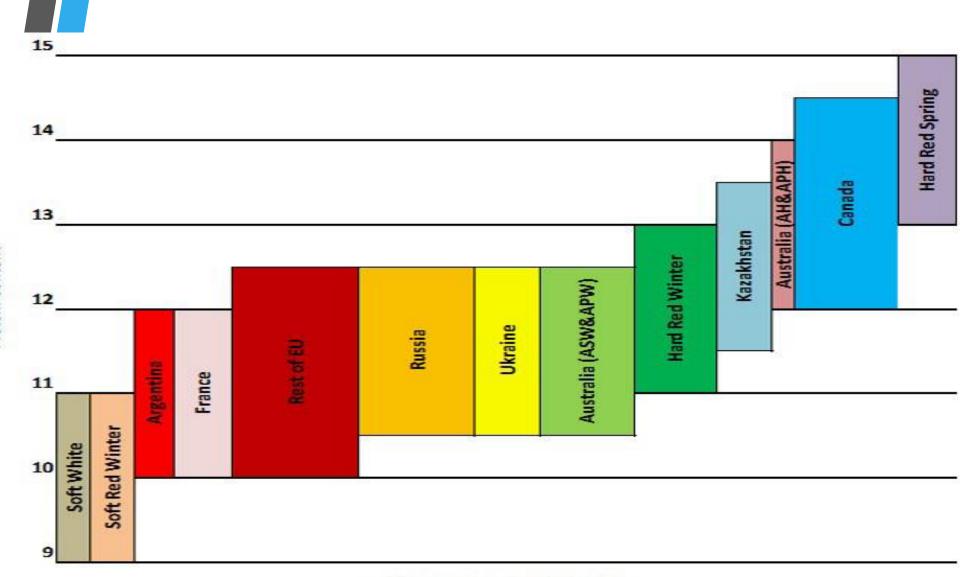


U.S. HARD RED SPRING WHEAT "DNS Wheat"

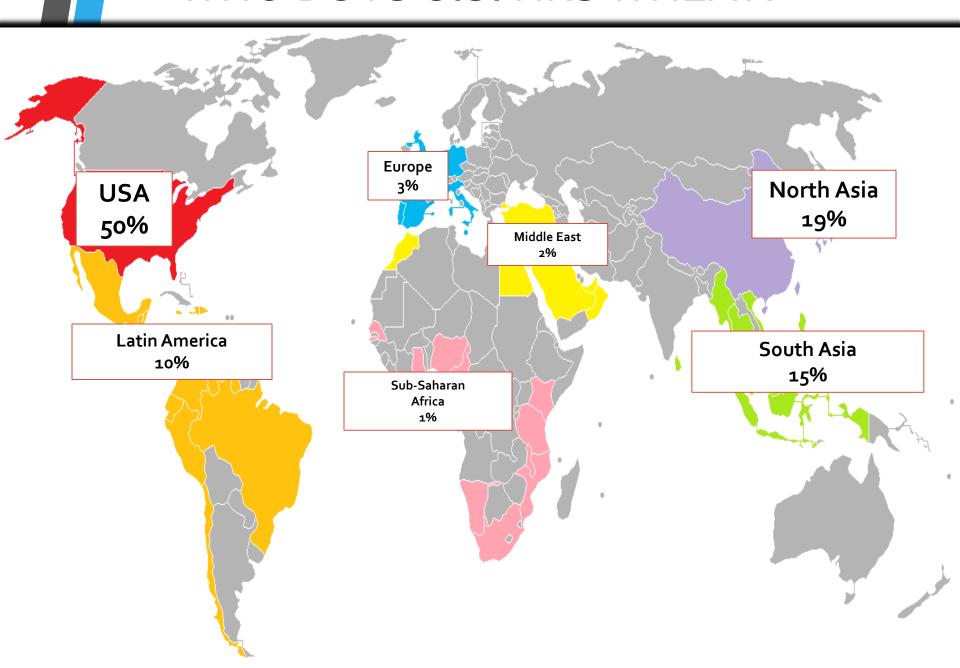
- > Second largest class produced in the U.S.
- **Known for:**
 - ➤ High protein content
 - ➤ High vitreous kernel levels
 - Dough strength and high water absorption
 - Big loaf volumes (with oven spring)
- Typically used as "blending" wheat (improve protein content and protein quality), specialty bread products and Asian noodles
- Major competitor is Canada, with some German, Australian and Kazak wheat offering limited competition dependent on year
- < 2% of Global Wheat Production but 4.5% of Global Wheat Trade



PROTEIN/QUALITY SPECTRUM MAJOR WORLD WHEAT SOURCES

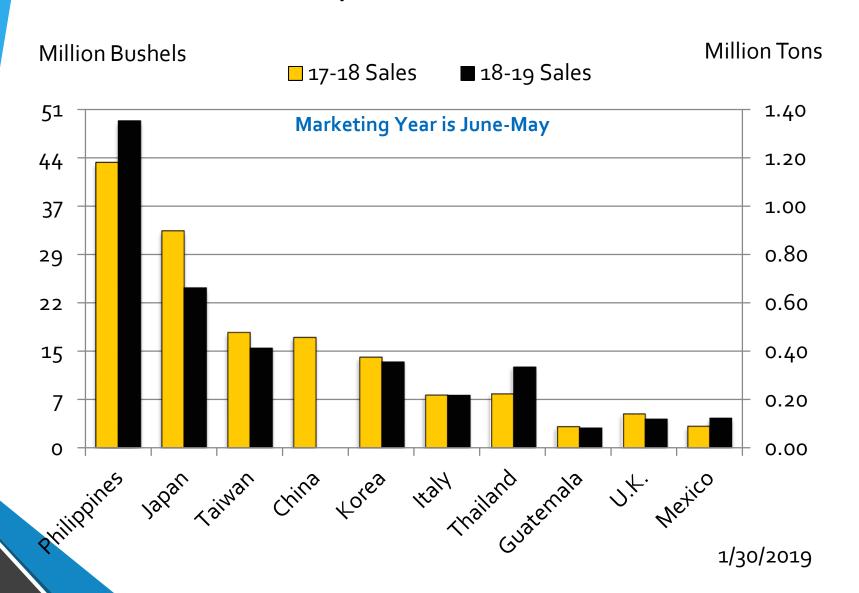


WHO BUYS U.S. HRS WHEAT?

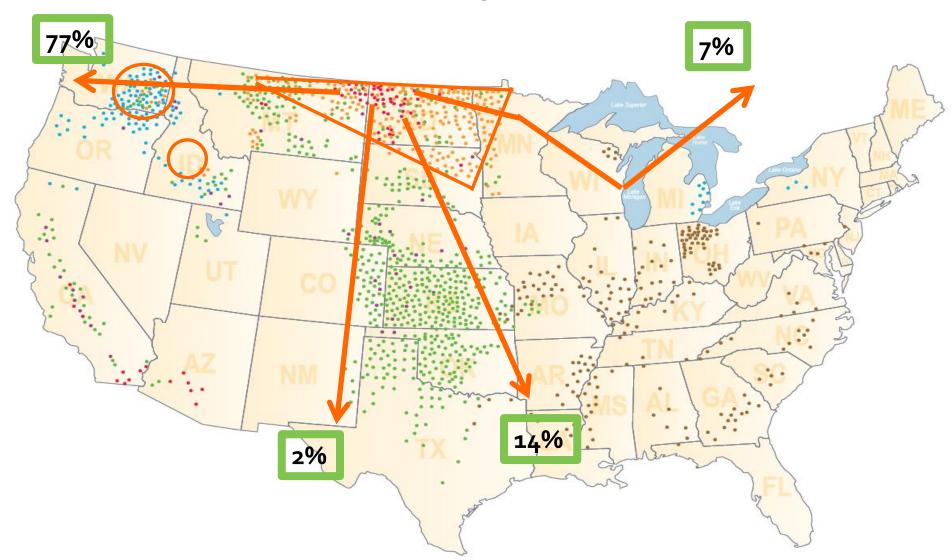


EXPORT SALES OF U.S. HRS WHEAT

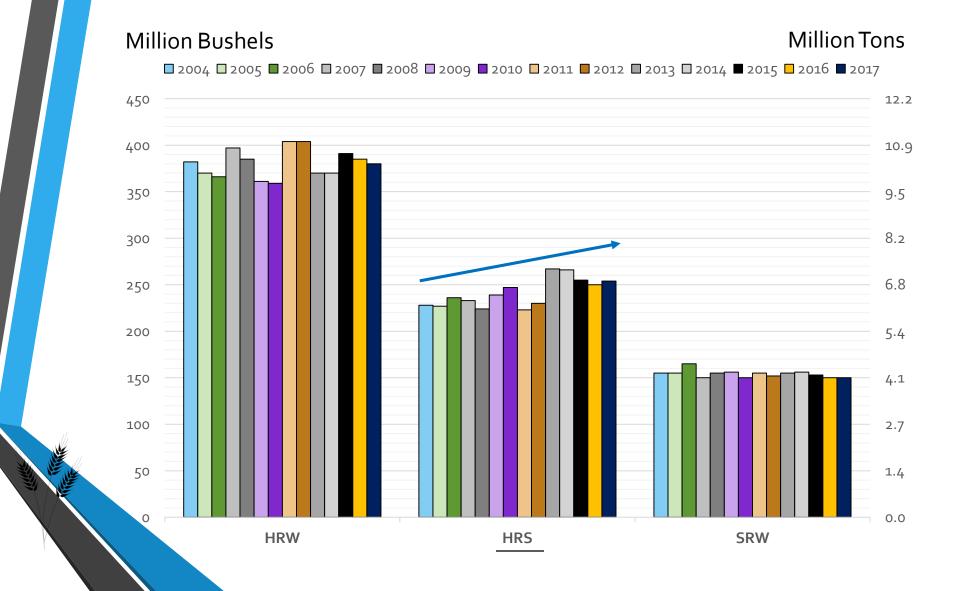
(Year-to-Year comparison – As of mid-December)



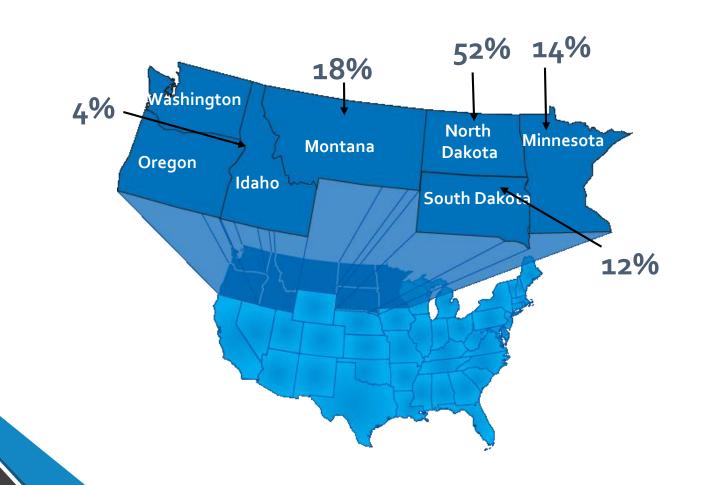
U.S. HRS PRODUCTION REGION / EXPORT PATH



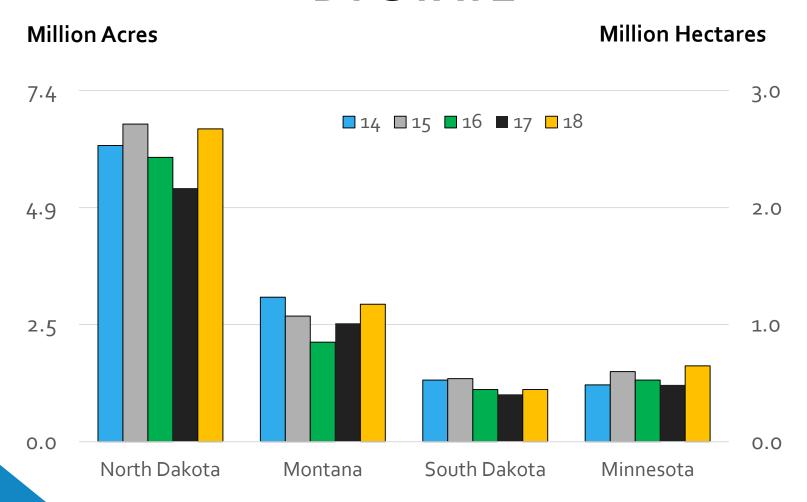
U.S. WHEAT FOOD USE BY CLASS



Typical Share of Production by State/Region



U.S. SPRING WHEAT PLANTINGS BY STATE



Source: USDA Small Grains Summary

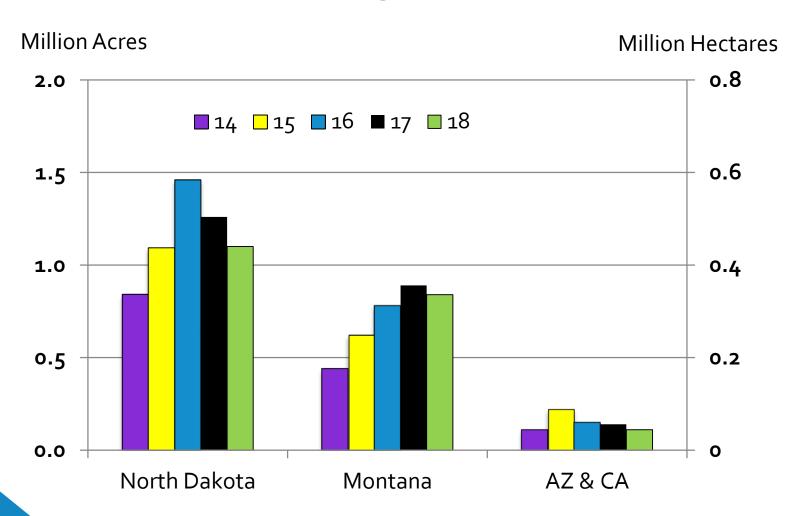
U.S. Northern Durum

- Valued for high protein, high vitreous kernels, and strong gluten
- >70% of demand is from U.S. millers
- Top international markets are Italy, Algeria, Nigeria and Central American countries
- Recent market challenges....improving domestic production in Algeria...Kazakhstan exports



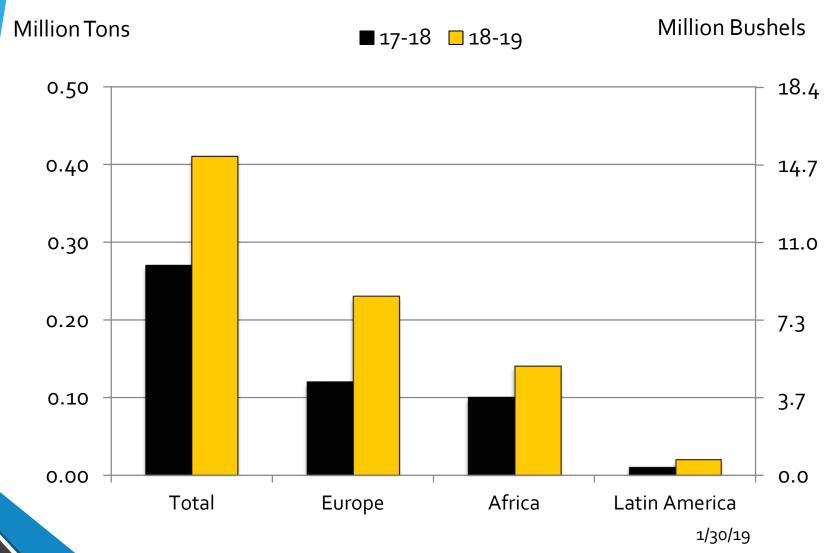


U.S. DURUM WHEAT PLANTINGS BY STATE



EXPORT PACE – U.S. DURUM WHEAT

as of mid-December



HRS and Durum Successes / Opportunities

- Strong base of traditional customers
- Premium prices in world market help offset to some degree "freight" disadvantage from North Dakota
- Push for "clean label" and higher fiber bread products favors higher percent of HRS in blends
- ➤ U.S. northern durum has advantage over EU and Desert Durum from sustainability perspective
- Two new durum varieties, Riveland and Grano, put us in great position if EU moves forward with lower Cadmium threshold
- ➤ U.S. HRS viewed as best in the world for gluten strength (recent improvement from 5-10 years ago)...but need to up breeding efforts for absorption

Wheat Challenges

- Competing crops
 - Per acre returns
 - Quality pricing risk
- Intense Black Sea competition
 - Directly impacts HRW but lowers base price of all wheat
- Increasing customer concerns over residues and allergens



Allergen Challenges

- Soybean & buckwheat allergens
 - **→** Japan and some EU markets
 - Buckwheat is similar to U.S. peanut allergy for segment of Japan population
 - Volunteer tame buckwheat in next season wheat crop is concern
 - As soybean production expands, customers finding higher levels of soybeans in wheat for some it is a GMO concern



Residue Challenges

- Glyphosate
 - Italy and U.S. market currently
 - Pre-harvest application is greatest concern by customers, but variability in testing brings all production into the mix
 - Producers need to remain vigilant on issue and when using as pre-harvest weed control follow post harvest window





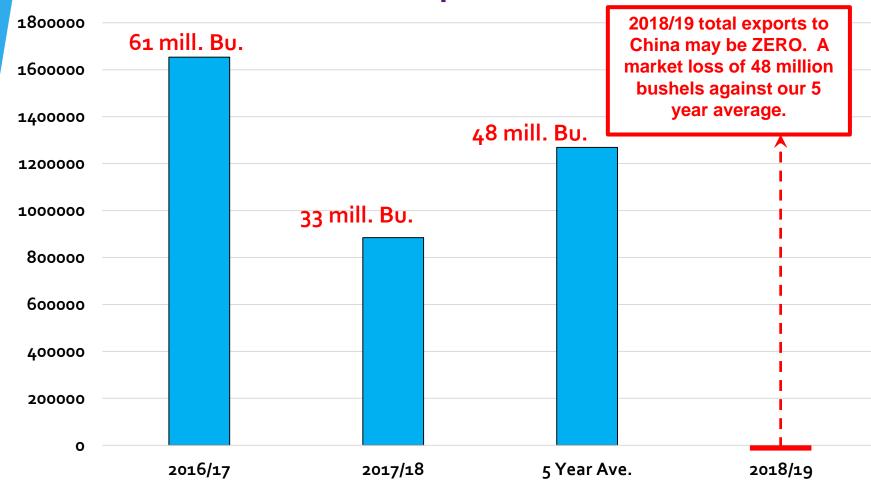
U.D. INTERNATIONAL TRADE POLICY

Trade Policy

- Work directly with U.S. Wheat Associates, National Association of Wheat Growers, ND Grain Growers and U.S. Durum Growers
- Need effective and forward looking trade policy
 - Popen new markets, preserve current markets and ensure fair/equal trading platform with competitors
- Current challenges and potential challenges exist in some very important markets
 - China and Japan
- U.S./China trade dispute
 - No wheat sales to China since March 2018
 - Has been a #2 market for U.S. HRS exports...as high as 40 million bushels
 - Buyers in China place high value on U.S. or Canadian spring wheat because they need it to upgrade large stocks of low quality domestic wheat
 - If current U.S./China talks successful....HRS is rumored to be of interest by China...



US Wheat Exports to China

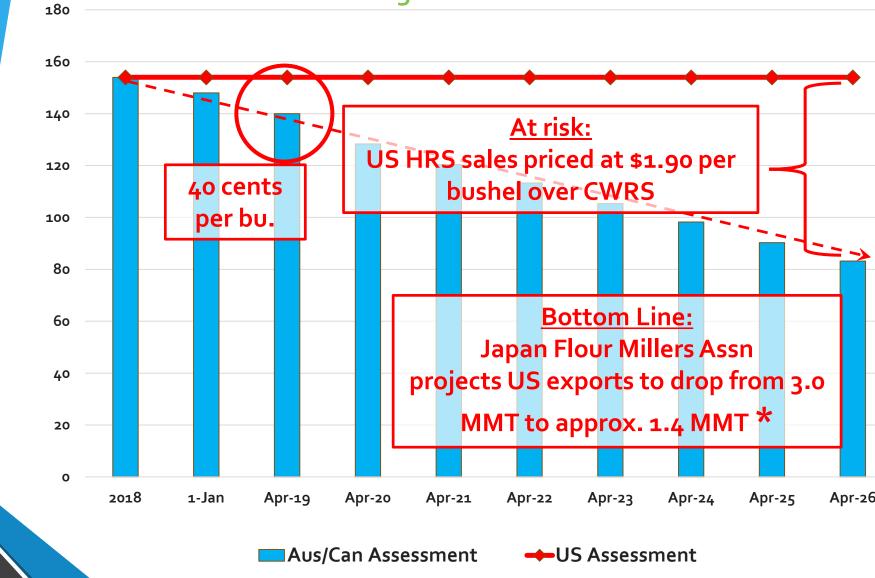


Trade Policy

- Comprehensive and Progressive Trans-Pacific Partnership (CPTPP)
 - Formerly TPP, U.S. dropped out in 2017
 - Signed December 31, 2018
 - Canada, Australia, Brunei, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam
 - Gives preferential access to Australia and Canada in Japan one of our largest HRS markets
 - U.S. potentially at a \$0.35-\$0.40/bu. disadvantage by April 1, 2019. Disadvantage could grow to \$1.90/bu. by 2027.
 - ➤ U.S. HRS wheat not likely to be 100% displaced since mills and end-users value U.S. HRS and Canadian HRS for different traits...but potential price discount for Canadian wheat is significant.
 - US Wheat Associates and member states pressing Administration to reengage with Japan on a bilateral

Japan: TPP Agreement to Lower Re-sale Mark-up Price advantage to Australia and Canada

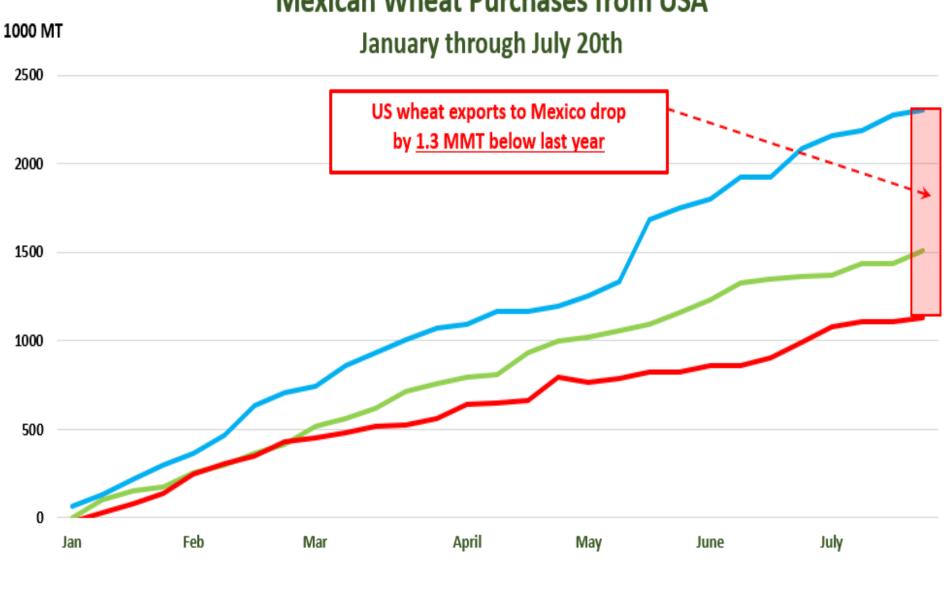
US\$/MT



Trade Policy

- > USMCA (United State Mexico Canada Agreement), revised NAFTA
 - Retains tariff free wheat exports to Mexico HUGE market impact
 - Addresses some issues with Canada on wheat...but not all
 - U.S. wheat no longer automatically downgraded to "feed"...must be given the same grading standards as Canadian produced wheat
 - The catch....agreement allows Canada to retain it's "approved variety" threshold for wheat classes...
 - To qualify for CWAD and CWRS (top prices).. must be an approved variety...very few ND, MT or MN varieties apply.....Glenn HRS and Strongfield Durum
 - More work yet to do on improving this....also addressing rail freight advantage and ensuring phyto issues don't hinder trade
 - Heavy imports from Canada having big impact on U.S. durum and HRS prices

Mexican Wheat Purchases from USA

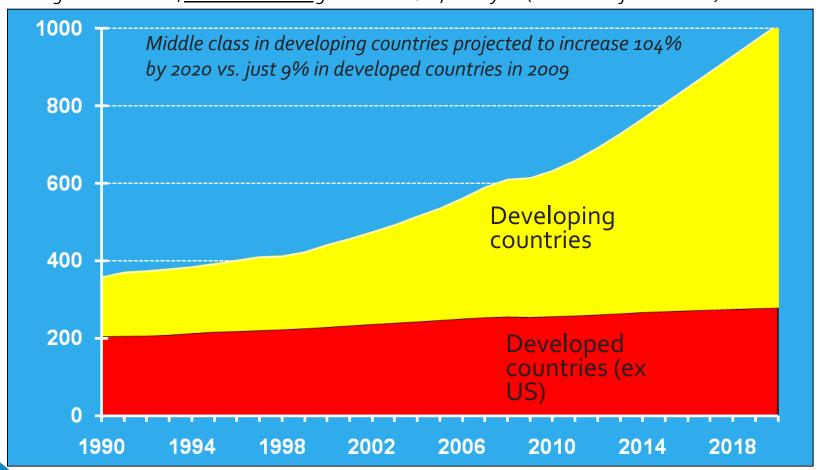


-2016 **—**2017 **—**2018

"Middle Class" *Outside the U.S.* Expected to Double By 2020 – To 1 Billion Households

Worldwide food consumption will be impacted

Foreign households w/<u>real PPP incomes</u> greater than \$20,000 a year (in millions of households)

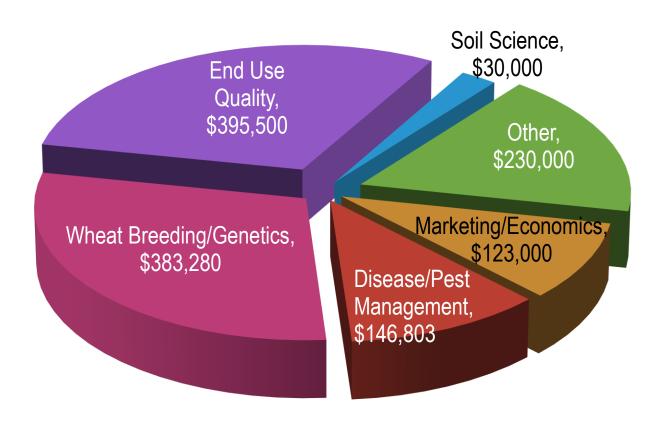


Source: Global Insight's Global Consumer Markets data as analyzed by OGA

Research

- NDWC funds between \$1.2 to \$1.7 million in wheat research annually
 - This has continually increased over time
 - State and federal funds still make up the majority of funding for NDSU research programs...but its share has declined in some programs.
- Key support areas
 - Variety development for HRS, durum, and HRW
 - Disease resistance, stronger straw and increased yields
 - Quality testing and research
 - Key selling factor in retaining "class" / "origin" premiums
- Other areas soil science, marketing, transportation and economics
- Priorities discussed at annual meeting with county representatives

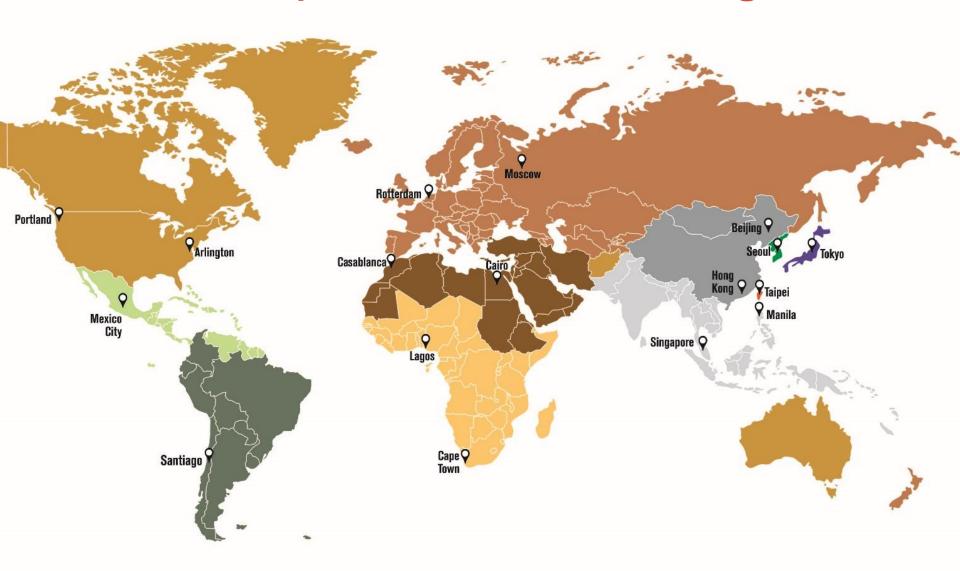
2018-19 BUDGETED NDWC SUPPORTED WHEAT RESEARCH: \$1,308,583







World Map of USW Offices and Regions



NDWC BOARD OF COMMISSIONERS



OUR MISSION

- Build bigger better markets for ND premium wheat
- Promote, aid and develop marketing opportunities for ND wheat
- Sustain and improve state ag economy



District 1 Jim Bahm New Salem



District 2
Dustin
Johnsrud
Epping



District 5 Greg Svenningsen Valley City



District 3 Jim Pellman McClusky



District 6
Aaron
Kjelland
Park River



District 4 Phil Volk York



At Large Bruce Freitag Scranton

THANKYOU

QUESTIONS?

