Maine Agriculture
Now & Looking to the Future

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Manufacturing & Natural Resource Based Industries Subcommittee
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Data and information

• Direct communication with industry groups/non profits/farmers/etc.
• Through the “Ag Service Provider” group organized through DACF in response to COVID-19
• Agricultural Council of Maine Members (https://maineagcom.org/)
• UMaine faculty and staff
• Random emails and direct communication from the public

Please note – Maine agriculture is vast and the ideas presented today represent a fraction of ideas/opinions/suggestions received. I tried to organize them into themes and ideas for the sake of discussion.
From my perspective:

• Forestry, Fisheries and Food are critical to the future of this state—we have some incredible opportunities in these three areas
  • Agriculture needs to follow the forestry industry and the fisheries/aquaculture industry and develop a roadmap for the future.

• Future of the state:
  • Climate Change
  • Natural Resources
  • Land transition – succession planning across industries
    • Potential for entry into these industries

• COVID Disruptions:
  • Connectivity
  • Increased awareness and desire for local foods
  • “Lifestyle” changes
    • Not traveling as much
    • Children looking for educational opportunities closer to home
    • Not eating out as much/more food being purchased from grocery stores/direct retailers
      • People growing their own food (potential increase for home-based businesses?)
  • Maine’s desirability is increasing
    • Increase people to the state
    • Land prices and availability
Cross-Cutting Themes

• Food Insecurity
• Climate Change
• Financial Support
• Increased Research
Cross-Cutting Themes

• Food Insecurity
• Climate Change
• Financial Support
• Increased Research

Talent
Innovation
Infrastructure
Ending Hunger in Maine by 2030

• From the DACF proposal “Ending Hunger in Maine”:

The time is right. The recent publication of the Maine Economic Development Strategy 2020 - 2029, the revival of the Children’s Cabinet, the Maine Shared Community Health Needs Assessment placing food insecurity as a priority issue, the push for comprehensive, high-quality childcare, and the focus on housing needs are all evidence that Maine is ready to look at how to address the underlying issues of food insecurity. We must harness this energy and look for opportunities to ensure that food insecurity and poverty are considered by all relevant stakeholders when enacting policies. Working together is the only way we will have a lasting impact on this complex issue.
From the NWL group of the Maine Climate Council (page 6)

• Strengthen research and development, and monitoring of climate mitigation and adaptation practices
  • Create a sustained source of funding for research on climate change and climate mitigation and adaptation strategies
    • Conduct research in support of agriculture and forestry mitigation and adaptation practices
    • Promote research and monitoring to inform adaptive management practices designed to conserve climate-sensitive species and habitats
  • Establish the University of Maine as the coordinating hub for partnerships among academia, the private sector, and state government in Maine, for research on forestry, agriculture, and natural land-related climate concerns
  • Continue to invest in the University of Maine research facilities in their efforts to become a globally recognized hub for climate-friendly bio-based wood market innovation, including Cross Laminated Timber (CLT), cellulosic insulation, pyrolysis oil, nanocellulosic materials, advanced biofuels, and bioplastics. Promote research, development and planning efforts supporting the growth and stability of Maine food systems
Direct Financial Assistance/Small Business Development

• “Farmers are also taking on additional debt, either with EIDL loans or other loans for necessary infrastructure changes, such as new refrigeration, fencing to protect from deer, etc. that were unplanned but became an immediate need. We need is a finance support program for farmers in distress. This could come in the form of loan guarantees with lenders and farmers in distress, or zero interest short term loans for farmers in distress, or funds for financial consultants to help farmers in distress so that they can get help to find new markets, work out finance problems with their banks etc.”

• There is a great need for small business development and management assistance for mid-size operations
Innovations - Business

1. Empowering ag entrepreneurs to initiate new enterprises that add value to Maine products, and that hold that added value in the hands of Mainers
   - Processing and value-added development grants
   - Market diversification grants to enable Maine commodity suppliers to diversify from one another, stabilizing market and increasing farm gate

2. Creating and supporting opportunities that forge strong emotional connections between consumers and Maine produced food
   - Agritourism opportunities that support small producers, and which increase local and regional demand for Maine products
   - Opportunities that strengthen farmer-consumer connections to create direct farm sales demand and more built-in resilience in our food system.

3. Supporting information technology infrastructure that strengthens farm businesses' direct connections to consumers, enabling more producers to pivot more quickly to direct channel sales when needed.
   - Broadband access
   - Financial assistance with business website development
   - Support of technology projects to develop new approaches of diversifying supply chains to increase resiliency
Infrastructure

• Supply chain disruptions
  • Coordinate with grocery chains, local retailers to ensure they are purchasing more local supply
    • Could Real Maine play a role in that?
    • Lots of great databases/lists out there now, how do we connect and coordinate them?

• Prepare more local producers to supply those products:
  • GAP certification:
    • provide state resources to help agricultural producers implement food safety requirements;
  • Other criteria?
  • Infrastructure development (processing facilities)

• Facilitate product aggregation/distribution
  • Investigate more cost-effective and collaborative distribution methods
  • Explore ways of strengthening distribution networks and processing infrastructure to facilitate the consumer to farmer connections
  • Explore new models of food sales direct to consumer like Imperfect Food and Misfit Markets for ME and NE
  • Explore helping local distributors scale up
  • Explore establishing statewide agricultural cooperative to coordinate aggregation, distribution and marketing.
Processing facilities

• Increase local processing infrastructure, including expanding the investment in on-farm and post-harvest infrastructure, as well as shared infrastructure.

• Possibly include washing, prepping food for convenience markets, packing, freezing, dehydrating, cold storage, packaging for the consumer.

• Explore Public-Private partnerships and cooperative ownership for dairy, livestock, seafood and produce processing.
Infrastructure (short and long term)

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• Explore Public-Private partnerships and cooperative ownership for dairy, livestock, seafood and produce processing.
Processing (Infrastructure or Innovation?)

• Dairy – on farm; micro scale
  • “The equipment needed to do this has always been prohibitively expensive, but recently a former dairy farmer and entrepreneur from Vermont has partnered with Bruns Bros., a food service manufacturing firm in Gray, Maine, and has begun building a state-of-the-art HTST micro scale processing plant. This plant will do the same thing as the large plants like Hood and Oakhurst, but on a 2-8 gallon per minute scale more closely matched to local direct marketing. Although these used to be more than $1,000,000, these newly designed systems can be turn-key for less than $200,000. Funding micro scale dairy could be done with the same fund used to purchase basis and possibly utilizing grant funds and partnering with non-profits.”
Maine Economic Improvement Fund (MEIF)

https://legislature.maine.gov/statutes/10/title10sec948.html

https://umaine.edu/meif/background/

- From the 2019 Annual Report:
  - Developing Workforce and Creating Jobs Five hundred plus full-time equivalent jobs are funded in Maine through the grants and contracts leveraged and expended related to MEIF. These positions include faculty, technicians and research staff. Currently 1054 graduate and undergraduate students are funded for their involvement in research, development and commercialization. This student involvement in research, development and commercialization projects is comparable to an internship and gives students great real-world experience as well as life-long networks and connections.

- Recommendation from the UMaine Research and Development Plan: Increase MEIF investment to reach a steady level of $40M by the end of 2024 (Innovation Recommendation?)
Innovation/Infrastructure

• Increase funding to the University of Maine for agricultural research and demonstration projects, particularly with respect to soil health, diagnostics, climate change, adaptation strategies, and technological innovation;
• Increase funding for Maine Cooperative Extension to conduct agricultural research and disseminate the information to farmers
• Explore ways to engage farmers in research design
• Encourage research on new agricultural product development
Innovation – Center for Food Innovation

III: Center for Food Innovation: New Food Processing Center with Food Testing Services Laboratory.

Estimated cost: $3-4 million dollars; combination of public and private funds, including corporate sponsorship and foundation gifts.

Estimated time to implement: Two to five years.

The Dr. Matthew Highlands Pilot Plant has evolved into a busy revenue-generating space through contract work with the food industry. We propose to capitalize on that momentum by expanding the facility into the new Maine Center for Food Innovation (CFI). The CFI will add commercial food processing space for four tenants, a new food testing/quality services laboratory, receiving/storage space, and a conference room for educational programs. The Center will add economic value to Maine’s food supply by fostering the development of new food products, while enhancing outreach, teaching and food testing, and generating revenues from these services. The impetus for this expansion is based on dozens of requests from startup and established food brands, including Wyman’s Wild Blueberries and Welch’s, for commercial processing space. The UMaine Food Testing Services laboratory provides a unique and essential service for Maine and food businesses nationwide, as the demand for these services has been consistent (product submissions exceed 350 products per year). Testing Services at this new location could generate additional revenue and help educate our students and clients on shelf stable product development. Investment in the Center for Food Innovation will strengthen UMaine’s outreach to the Maine food industry, while expanding educational opportunities for our students and clients.
Workforce

• Explore ways of supporting agricultural training and apprenticeship programs, particularly around scale-appropriate technology
• Develop policies and programs to support the agricultural workforce, including foreign farmworkers
• Explore farm labor cooperatives to meet the labor needs of multiple farms
• Increase opportunities for youth to be exposed to the opportunities within the agricultural industry (increase resources for 4-H and/or FFA in schools)
• Look at certificate and credentialing programs that skilled members of the ag workforce would need and partner with community colleges/universities to make these available
Workforce Continued...

• “Excessive reciprocity restrictions in Maine’s antiquated profession and occupation laws discourage the immigration of talent certified in other States (landscaping, horticulture, engineering, architecture, surveying, geologists-soil scientists, electrical, plumbing, ironwork/welding). This needs reform as it maintains status quo control over market share, prevents robust competition in this State, restricts our economic potential, and increases costs burdens on Mainers.

• The need for expanded vocational-technical center education in landscaping, horticulture, engineering, architecture, surveying, geologists-soil scientists, electrical, plumbing, bricklaying, ironwork/welding, glazing, and HVAC sheetmetal is also holding back Maine’s economy and our ability to be more economically resilient.

• This needs reform as younger generations are unaware of these high-demand (and often well-paying) occupations and the regulatory burdens prevent Maine from absorbing talent from other regions of the country, forcing us to subsidize the taxes of other states when importing out-of-state labor to build for us because we can’t take care of ourselves.”