August 11-12, 2014

State of Michigan Agriculture Logistics and Supply Chain Assessment and Strategy Recommendations

Dr. David J. Closs and Dr. Frederick A. Rodammer
Michigan State University

rodammer@broad.msu.edu

Research Project Description

This project is designed to complete an overall end-to-end supply chain assessment of key commodity segments of agriculture in Michigan. The objective is to determine the aggregate flows, identify major infrastructure constraints, and provide recommendations and rationale for critical investments to improve Michigan's economic competitiveness and job creation opportunities.

When the project is complete, the logistics and supply chain strategy recommendations for commodity crops will be shared and leveraged for other Michigan crops.

Value Created

- Reduced cost or cost avoidance for all stakeholders
- Improve service by reducing cycle times and delays for transport and processing
- Reduced supply chain risks for all stakeholders
- Creation of new Michigan jobs
- Prioritize infrastructure and policy recommendations impacting the agriculture industry

Project Plan

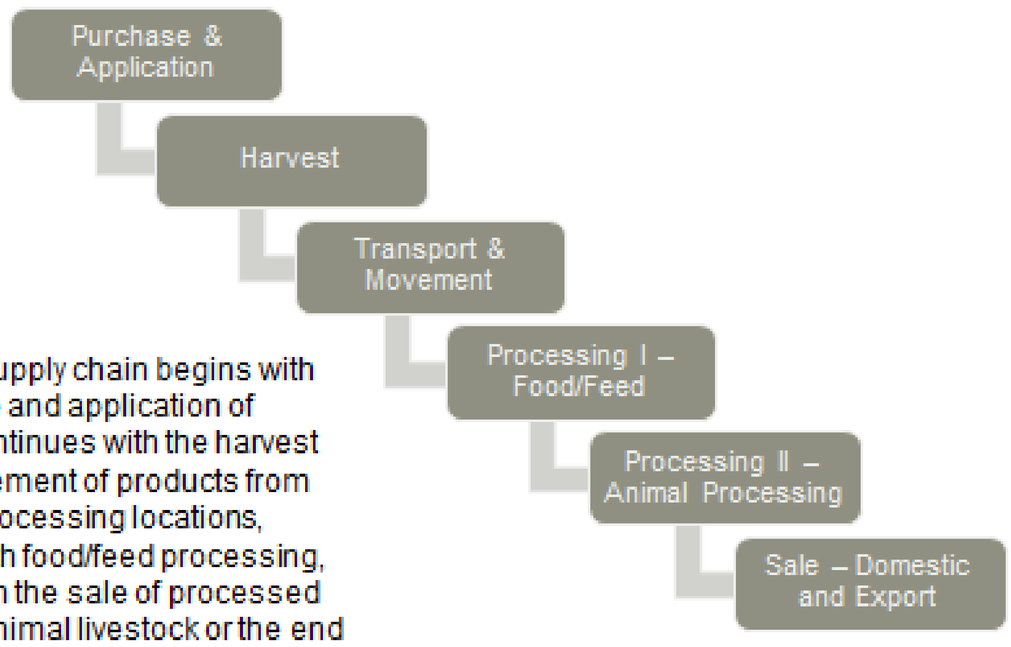
Phase I	Project Charter, Work Plan, Resources	Relevant Workshop Date:
Phase 2	Data Collection (Ongoing)	Workshop #1 February 21, 2014
Phase 3	Analysis & Process Modeling	Workshop #2 April 17, 2014
Phase 4	Develop SCM Recommendations	Anticipated: September 2014
Phase 5	Validate Recommendation	Anticipated: November 2014
Phase 6	Implementation Planning	Project Completion 2Q, 2015

Project Stakeholders

- Michigan Soybean Promotion Committee
- Corn Marketing Program of Michigan
- Michigan Wheat Program
- Michigan Bean Commission
- Michigan Farm Bureau
- MSU Department of Supply Chain Management
- MSU Product Center
- MDARD
- MEDC
- MDOT

MICHIGAN STATE UNIVERSITY

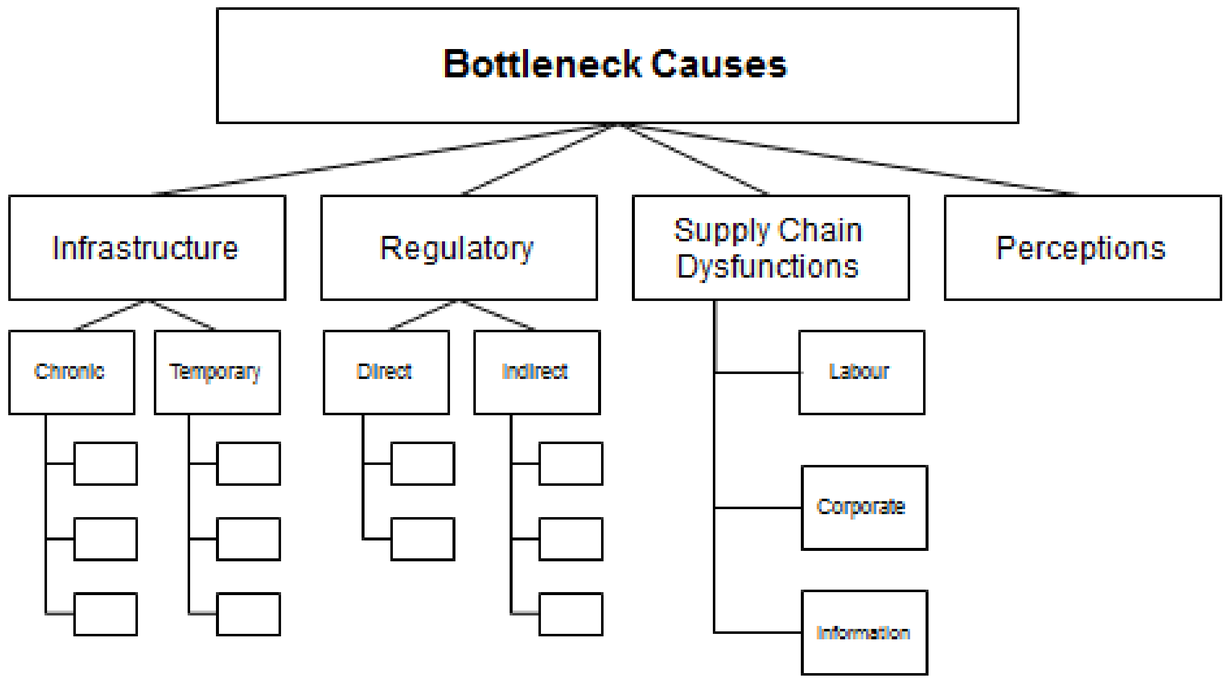
Project Scope: End to End Supply Chain



End to end supply chain begins with the purchase and application of fertilizers, continues with the harvest and the movement of products from the field to processing locations, continues with food/feed processing, and ends with the sale of processed product for animal livestock or the end consumer.

MICHIGAN STATE UNIVERSITY

Potential Supply Chain Improvement Scenarios



https://umanitoba.ca/faculties/management/ti/media/docs/CTRF03_Bottleneck.pdf