

Program: Economic Sustainability – Livestock Systems

Situation: The NC Region is home to a substantial portion of the U.S. livestock industry. Our 12 states annually market about 19 million head of cattle, market about 107 million head of hogs, and milk about 3.2 million cows, which account for 44, 72, and 35% of the total U.S. production, respectively. The production value of these three livestock industries combined to provide approximately \$31 billion to growers in 2009 and contributed nutritious meat and milk to our nation's citizens. Other chicken, turkey, sheep/lamb, and goat livestock industries also contribute to the economic sustainability of NC growers and benefit of society. These producers need education on the latest technology and decision tools to remain profitable in the face of high production and labor costs and low market prices to continue to supply nutritious food and support global food security.

Inputs	Outputs		Outcomes – Impact		
	Activities	Participation	Learning	Action	Condition
<p><u>Extension</u></p> <ul style="list-style-type: none"> Specialists with expertise in animal science (nutrition, reproductive physiology, meat physiology, etc.), farm business and economics, biosystems engineering, and veterinary science. County educators <p><u>Ag. Expt. Stations</u></p> <ul style="list-style-type: none"> Researchers such as geneticists, nutritionists, ag engineers, etc. <p><u>Partnerships with</u></p> <ul style="list-style-type: none"> Livestock associations Genetic, pharmaceutical, manufacturing, processors, and banking industries State and federal agencies (Depts. of Ag. Health, and Natural Resource, NRCS, FSA, etc.) 	<p><u>Internal planning/development</u></p> <ul style="list-style-type: none"> Needs assessments through formal and informal multi-state meetings Regional program coordination through multi-state meetings Professional subject matter development of county and state staff <p><u>Program delivery methods</u></p> <ul style="list-style-type: none"> Farm tours Workshops – in-depth training events County meetings – local, grower focused events Conferences – state and regional scale events <p><u>Communications tools</u></p> <ul style="list-style-type: none"> Web – specialist, university, and regionally supported Newsletters – county and state focused to address local issues Bulletins – state and regional level Video (i.e. youtube) and Webinars – newer tools to dynamically and interactively reach local and regional audiences 	<p>Growers targeted for <u>training include:</u></p> <ul style="list-style-type: none"> Full-time and part-time producers Beef cow/calf and feedlot, hog farrowing and finishing, dairies, and lamb/wool producers Producers in all 12 NC states <p>Ag-professionals are targeted for training because they serve as <u>multipliers:</u></p> <ul style="list-style-type: none"> Nutritionists Veterinarians Genetic suppliers Pharmaceutical reps Processors Lenders <p><u>Agency partners</u></p>	<p>Knowledge will be gained in <u>the following topic areas</u></p> <ul style="list-style-type: none"> Genetics and sire selection for increased production or quality New reproductive techniques and tools Importance of animal stewardship and standards Practices to improved herd health and product quality Options to manage feed costs Facilities to meet environmental issues Profitability of alternative markets Issues related to facility expansions Risk management and marketing tools 	<p><u>Producers will</u></p> <ul style="list-style-type: none"> Use production records for selecting sires Become certified in quality practices Use technologies to increase breeding efficiency Use efficient feeding systems (i.e. grazing) and rations Reduce death losses by improving management Evaluate the decisions to change level of production based on sound financial and facility analyzes Use marketing tools to minimize risk and maximize profits 	<p><u>Producers will</u></p> <ul style="list-style-type: none"> Increase the feed efficiency of their livestock Increase meat quality Increase knowledge of marketing options Increase knowledge of financial issues of livestock production <p>U.S. and global consumers will have an adequate supply of high quality and safe meat and dairy products</p>

Assumptions: Feed costs will remain high or be volatile. Genetic advances will increase efficiencies and meat quality. Consumer demand for meat and dairy products will remain stable. Demands for increased animal stewardship will increase. The need to identify and track animals from production through processing will increase to satisfy the market. The industry needs to remain prepared for disease emergencies.

External Factors: Concerns will continue about food safety because of food borne illness. Operations planning new facilities and expansions will face siting and permitting challenges. Foreign countries may intermittently close markets and affect demand.

Evaluation

Learning indicator: Number of producers trained; number of ag-professionals trained

Action indicator: Number of livestock managed by producers using extension recommended practices (select new species each year)

Condition indicator: Long-term trends in livestock production efficiency and farm incomes

Banner Outcome - Economic Value: Knowledge of livestock producers about livestock production practices and costs will be increased and will have a positive affect on producer incomes..

