extension education

285 Tennessee producers' perceptions of dairy farm facilities and their future in the industry. A. Sen*, S. Schexnayder, D. Bilderback, and E. Eckelkamp, University of Tennessee Institute of Agriculture, Knoxville, TN.

Farm facilities impact cow comfort, production, farm profitability, and success. Our objective was to identify barriers to dairy producers' permanency in Tennessee (TN). Our sub-objective was to assess producers' perceptions of existing farm facilities' longevity, facility investments in the last 5 yr, and planned facility improvements over the next 5 yr. A survey was distributed electronically and by mail in August 2019. Data were collected on producers' decision to stay or exit the dairy industry in the next 5yr and their perceived longevity, past investments, and investment plan or automation in parlor equipment (PE), milk cow housing (MCH), dry cow housing (DCH), calf housing (CH), young stock housing (YSH), manure handling and storage (MHS), and feed handling and storage (FHS). Ninety surveys were returned and used in the analyses representing 48% of TN dairy producers. The FREQ procedure in SAS 9.4 was used to calculate the frequencies. Univariable logistic regression was done to identify barriers to producers' permanency. Significance level was set at \( P < 0.10 \). Mean ± SD herd size was 250 ± 356 (dry ± lactating; range: 14 to 2300). For all facilities, mean ± SD perceived longevity was ≤5 yr (30 ± 4% of respondents), 6 to 10 yr (32 ± 3% of respondents), 11 to 15 yr (18 ± 2% of respondents), and >15 yr (20 ± 5% of respondents). Over the last 5yr, producers invested in PE (n = 56), MCH (n = 33), CH (n = 24), YSH (n = 14), MHS (n = 32), and FHS (n = 48) with 15 producers not investing in any improvements. Over the next 5yr, the top 3 facility improvements were PE (n = 25), MHS (n = 20), and FHS (n = 18), with 20 respondents planning no improvements. Very few producers (12%; n = 10) planned to have automation in any facilities. Producers who did not invest in MCH \( (P = 0.01) \), CH \( (P = 0.03) \), and MHS \( (P = 0.09) \) in the last 5yr were more likely to exit the dairy industry. Although 62% of producers perceived facility longevity was <10 yr, ≤29% of respondents planned any facility improvements over the next 5 yr. Improved animal housing and manure management might increase dairy producers' permanency in TN.

Key Words: farm facilities, improvement, investment

286 Do educational farm tours reduce concerns of individuals with greater concern about how food is produced? T. A. Ferris1, R. R. Peters*, E. A. Richer1, R. G. Slattery2, C. W. Anderson2, M. J. Rupp3, and K. M. Miller1, 1Michigan State University, East Lansing, MI, 2University of Maryland, College Park, MD, 3Ohio State University Extension, Wauseon, OH.

Breakfast on the Farm educational tours were held for consumers in Maryland and Ohio in 2019 with an objective of determining if tours increase trust in farmers and modern food production. Using an exit survey, participants indicated their level of trust that farmers will do right in managing various aspects of dairy farms. Using a 5-pt scale from Very low trust to Very high trust, respondents provided their level of trust BEFORE and AFTER the tour to self-assess changes in trust. Individuals were asked if they purchase organically produced products on a 5-pt scale from Never to Always. Those reporting purchases of organic, Never, Rarely, or Sometimes (n = 324) were coded non-organic consumers, and those who responded Very often or Always (n = 105) were coded organic consumers. Mean level of trust for farmers Caring for the environment for non-organic consumers was 4.02 vs. 4.49 after with an increase of 0.476 while organic consumers had a lower mean of 3.69 before vs. 4.37 after with a greater increase in trust of 0.682. Similarly, mean levels of trust for farmers keeping milk safe and after were 4.30 vs 4.62 and 3.90 vs. 4.49 for non-organic and organic consumers, respectively. Likewise, means for Caring for food-producing animals before and after were 4.13 vs. 4.55 and 3.75 vs. 4.41 for non-organic and organic consumers; and for Using antibiotics responsibly before and after were 3.95 vs. 4.38 and 3.53 vs 4.22 for non-organic and organic consumers. All changes in means before and after responses for non-organic and organic consumers were significant \( (P = 0.0001) \) with a paired-\( \text{t} \)-test. For organic consumers, means increased most for Using antibiotics responsibly. Differences in means between non-organic and organic consumers ranged from 0.33 to 0.48 before and 0.12 to 0.26 after with the greatest difference after for using GMOs responsibility. These tours increased trust significantly in both groups and although buyers of organic products may have different perspectives before their visit, their trust became closer to those who do not purchase organic.

Key Words: educational farm tour, consumer perception, organic consumers