## Dairy Logic Model Situation:

Major trends in U.S. milk production include (1) a fairly steady increase in milk production and (2) a consistent decline in the number of dairy operations matched by a continual rise in the number of cows per operation. Generally, milk cows perform best in areas with dry, cool weather. Most U.S. dairy cows are Holsteins, a breed that tends to produce more milk per cow than other breeds. However, Jerseys and crossbreeds have gained popularity in recent years, as milk from these breeds tends to contain relatively high proportions of milk fat and other milk solids.

In the United States, the decision to produce milk largely rests in the hands of individuals or families. Many of these farmers belong to producer-owned cooperatives. The cooperatives assemble members' milk and move it to processors and manufacturers. Some cooperatives operate their own processing and manufacturing plants. Initially local, many of today's dairy cooperatives are national, with members across the country. (USDA <a href="https://www.ers.usda.gov/topics/animal-products/dairy/background/">https://www.ers.usda.gov/topics/animal-products/dairy/background/</a> )

Inputs	Outpo Activities	uts Participatio	on	Short	Outcomes Medium	Long
UK Dairy Specialists and Kentucky Dairy Development Council The Dairy Alliance of Kentucky Department of Agriculture Extension Agents Other dairy Organizations Local and industry media	Newsletters and Social Media Including – • Kentucky Dairy Notes UK Publications, Resources, and Programs Including: • Animal Wellness • Business Management • Economics of Mgt. Practices • Environmental Programs • Facilities • Forage/ corn silage • Genetics/ Reproduction • Herd Health • Labor Mgt. • Milking Management/ Mastitis Control • Nutrition • Production Records http://afs.ca.uky.edu/dairy	<ul> <li>Extension Agents</li> <li>Dairy Producers</li> <li>Beginning Farmers</li> <li>Amish and Mennonite farmers</li> <li>Non-English Speaking Farm Workers</li> <li>Allied Industry Partners</li> </ul>		Increased knowledge of dairy production related to: • Business management • Facilities • Herd Health • Reproduction • Genetics • Nutrition • Herd Management • Facilities and Handling • Labor Management • Current trends • Monitoring technology Develop a basic understanding of the dairy industry including: • Where milk comes from • Health benefits of milk products • Pricing of dairy products	Adopted Genetic and/or Reproduction practices to improve herd quality including AI and Synchronization protocols Practiced recommended Business Management including: • Budgeting, • Calculating cost of production, • Maintaining DHI Records, • General Management • Labor Management • Labor Management • Marketing • Precision Dairy Farming Examined and implemented Facility changes including: • Compost Bedded Pack Barn • Cow Comfort • Free Stall Management • Heat Stress Management • Moving cattle • Tie Stall Management • Other facility areas Provide proper Nutrition (including forage/ silage production) for:	Producers benefited fror increased production and/or quality of milk (Economic)
	Conferences and Field Days Including: • KY Dairy Partners Annual Meeting • Local Meetings • Dairy Tours		<ul> <li>Animal Wellbeing including:</li> <li>Moving cattle</li> <li>Euthanasia</li> <li>Disbudding (removing horns less than 8 wks. of age)</li> <li>Preventing lameness</li> </ul>		Calves     Heifers     Dry cows     Milking cows	Herd health
	Farm Visits and Consultation (including phone calls)	ons	Practice Milkir Control	ng Management / Mastitis	<ul> <li>Foot care</li> <li>Cow Diseases</li> <li>Reduced use of Antibiotics</li> </ul>	and quality improved (Social)