Brazilian milk production has become prominent in recent years. Brazil is the fourth largest milk producer in worldwide. In this context, Paraná State is one of the largest producer in this country. In 2015, Paraná milk production in Paraná has achieved about 4.66 billion liters. Dairy Production Systems (DPS) in Paraná is very heterogeneous in some ways, as activities diversification; capacity of production; farm area; applied technologies and farmer's socioeconomic profiles. In view of this, we aim to analyze the typology of DPS dedicated exclusively to dairy production versus dairy production systems dedicated to dairy and other activities – diversified production systems. We applied 204 forms in DPS located in three regions of Paraná, Central, Western and Midwest. Variable analysis was performed by descriptive procedures and mean test (t test). We found that 60.4% of DPS has diversified the activities (Group 1 = G1) and other 40.6% (Group 2 = G2) of DPS do not diversify the production. Among the secondary activities some are more applied, agriculture; poultry production; pig production; beef cattle production and sheep production. Considering some structural and productive variables, it has been found that dairy farmers who diversify production have higher production area (P<0.05) compared to those producing only milk (G1 = 53.61 ± 92.09; G2 = 21.98 ± 31.44). However, the area applied in milk production did not differ (P<0.05) among the analyzed groups (G1 = 21.87 ± 3.73; G2 = 21.94 ± 27.40). Considering milk production (L/day) was found differences (G1 = 1002.03 ± 2103.73; G2 = 1316.01 ± 3169.70). We conclude that farmers dedicated exclusively to dairy activity have higher production scale: on average, 314 liters more per day, compared to those that diversify the activity. This can be explained by the tendency of these farmers to adopt more technologies and devote more time to the production of milk, since it consists of the only source of income of the production system.

Keywords: dairy production, heterogeneity, pluriactivity, profile of the producer, socioeconomic profile