

**Table 2.** Geographically averaged input data was used to run a process-based model (RUMINANT) to predict changes in emissions and revenues with changing diets under two scenarios.

| District | Baseline diet                              |   | Improved feeding            |  |   |
|----------|--|---|-----------------------------|--|---|
|          | Cost of CO <sub>2</sub> e emissions (US\$) | Baseline net revenue per L of milk (US\$) | Scenario                    | Cost of CO <sub>2</sub> e emissions (US\$) | Baseline net revenue per L of milk (US\$) |
| Garissa  | 6.53                                       | 0.33                                      | <b>Prosopis</b><br>1.5 kg   | 6.45                                       | 0.23                                      |
|          | 6.53                                       | 0.33                                      | 3 kg                        | 6.16                                       | 0.18                                      |
| Gem      | 7.77                                       | 0.11                                      | <b>Desmodium</b><br>1 kg    | 7.52                                       | 0.26                                      |
|          |  |   | 2 kg                        | 7.85                                       | 0.23                                      |
| Mbeere   | 9.64                                       | 0.04                                      | <b>Napier grass</b><br>2 kg | 9.94                                       | 0.16                                      |
|          | 9.64                                       | 0.04                                      | 3 kg                        | 9.90                                       | 0.15                                      |
| Othaya   | 9.57                                       | 0.15                                      | <b>Hay</b><br>2 kg          | 9.68                                       | 0.16                                      |
|          | 9.57                                       | 0.15                                      | 4 kg                        | 9.61                                       | 0.11                                      |
| Njoro    | 9.06                                       | 0.14                                      | <b>Grevillia</b><br>1 kg    | 9.61                                       | 0.19                                      |
|          | 9.06                                       | 0.14                                      | 2 kg                        | 10.63                                      | 0.19                                      |