Livestock and their management

In 2013, there were over 26 million livestock animals (includes poultry), with over 1 million dairy cows.[56] The 2050 Calculator contains two options relating to agricultural biomass and land use: livestock management (described here) and land use management (described on another page).

Trajectory 1

Level 1 assumes that, by 2050, domestic food production and exports take priority. Livestock numbers increase by 15% over 2013 levels. The number of cattle for beef farming stay approximately the same but there are 500,000 more dairy cows grazing on Irish grass in 2050 and there are an additional 500,000 pigs to meet growing international demand for pork.

Trajectory 2

Level 2 assumes that total livestock numbers remain approximately constant through to 2050. The number of dairy cows and pigs grow by 15% (in line with projections under the 2020 Food Harvest Strategy[57]) but this is offset by a decline in beef farming. Due to manure yields increasing by 0.2% per year, more energy from waste is generated from agricultural by-products.

Trajectory 3

Level 3 assumes that livestock numbers reduce by 10% by 2050. This means there will be almost 100,000 fewer dairy cows and 500,000 fewer beef cattle in Ireland by 2050.

Trajectory 4

Level 4 assumes a significant shift away from livestock production in Ireland, potentially caused by us eating less meat, by switching from beef to less land-intensive meats such as chicken, or increasing the agricultural focus on bioenergy. Livestock numbers decline by 20% on 2010 levels, equivalent to 200,000 fewer dairy cows by 2050 and 2 million less cattle, pigs and sheep.

Figure 35. An Irish cow is assumed to produce 400 oven dried kg of manure each year.

Figure 36. TWh(primary energy)/yr produced if 40% of manure collected for energy use

Note: 'Land dedicated to bioenergy lever' set at trajectory 1.