

37. Main protein source

Predicting dietary change is a difficult process. China’s economic development resulted in a huge boom in meat, especially pig, consumption. By contrast India’s economic development has resulted in much dietary change at all.

The last decade

Fish has always been a key part of the Bangladeshi diet, and aquaculture of fresh water fish continues to expand to meet demand. Milk production and consumption has also increased. In 2010 Meat, Dairy and Fish respectively gave 1.90g, 2.00g and 5.40 grams of protein per person per day. Vegetables + Eggs gave 46.30 grams of protein.

Assumptions of model

The model assumes that average protein consumption will slowly rise 20% to about 66 grams. This is in line with the increase in calorie consumption and is also in agreement with dietary recommendations. It means that consumption of dietary sources that are not the focus of the scenario does not decrease either. A key assumption is that the components of the Vegetables and Eggs diet does not change. A relative increase in pulses would provide a more efficient source of vegetable protein.

Levels

Level 1

70% of the required protein is sourced from Meat sources, specifically Goat, Cattle and Chicken. The other sources provide 10% of the requirement each.

Level 2

70% of the required protein is sourced from Dairy sources, specifically Goat and Cattle milk. The other sources provide 10% of the requirement each.

Level 3

70% of the required protein is sourced from Fish sources, mostly from farmed fish. The other sources provide 10% of the requirement each.

Level 4

70% of the required protein is sourced from Vegetables and Eggs. The dietary ratio of different vegetables is set based on the 2010 BBS production statistics. The other sources provide 10% of the requirement each. This is very similar to the current diet in Bangladesh.

Interaction with other levers

The calories implied by the protein intake are counted towards the daily calorie intake, set by the 'Dietary Nutrition' lever. This lever has a fundamental affect on the types of crops, livestock and residues available for the bioenergy sector.

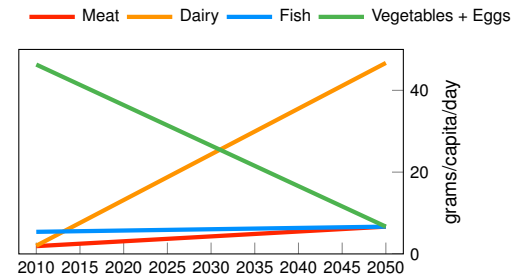


Figure 37.1: Protein sources under the Dairy Scenario