Glossary of terms used in agri benchmark

Whole Farm Level

Nr.	Name of variable	Explanation / definition
Cost structure used for profitability calculations		
	Cash cost	Cash cost for purchased feed, fertiliser, seeds, fuel, maintenance, land rents, interest on liabilities, wages paid, veterinary costs plus medicine, water, insurance, accounting, etc (excl. VAT).
	Cost from the profit and loss account	Cash cost + depreciation.
	Depreciation	Linear depreciation on machinery and buildings, calculated on replacement values.
	Factor cost	Sum of labour, land and capital cost (including opportunity cost).
	Non-factor cost	The residual of total cost less factor costs including depreciation.
	Opportunity cost	Calculated cost for using own production factors like labour (family working hours * wage for qualified local labour, land (own land * regional land rents) and capital (non-land equity * long-term government bonds interest rate).
Price indices in national currencies		
	Domestic impact	The change in costs associated with changes in domestic prices and productivity with the USD exchange rate kept constant.
	Exchange rate impact	The change in costs associated with changes in the USD-exchange rate with national price and productivities kept constant.
	GDP-Deflator	It is a price index measuring changes in prices of all new, domestically produced, final goods and services in an economy. GDP stands for gross domestic product, the total value of all goods and services produced within that economy during a specified period. The list of GDP-deflators used is provided in Annex A.1.
	Real prices	Real prices are derived by adjusting nominal (market) prices for inflation. To do this, an appropriate deflator has to be chosen. For this exercise, the decision was made for the GDP-deflator as it reflects all goods and services of the economy. To obtain the real price index from the nominal price index the following calculation was performed: Nominal price index / GDP-deflator * 100.

Calculation flow on whole farm level

	Total receipts
+	market returns enterprises
+	coupled government payments enterprises
+	decoupled payments whole farm level
–	**Total expenses**
+	variable costs enterprises (direct costs)
+	fixed/overhead costs whole farm
+	paid wages whole farm
+	paid land rent whole farm
+	paid interest on liabilities whole farm
=	**NET CASH FARM INCOME**
–	Depreciation
+ / -	Change in inventory
+	Interest on savings
+ / -	Capital gains / losses
=	**PROFIT, FARM INCOME**
–	Opportunity costs
	(+ calculated interst on own capital)
	(+ calculated rent on land)
	(+ calculated cost for own labour)
=	**RETURN TO MANAGEMENT**

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Beef Finishing

Nr.	Name of variable	Explanation / definition
Beef finishing production system (in alphabetical order)		
	Age at start and end	Age in days when animals enter and leave the system.
	Backgrounder / Store / Feeder	Animals between 4 and 15 months beyond the calf / weaner stage which had an initial fattening phase.
	Cattle number	Total number of fattening cattle produced per year. Also used to indicate farm sizes of *agri benchmark* beef farms.
	Cost of the beef enterprise	All cost of the beef enterprise. The beef enterprise as a part of the whole farm includes all beef cattle and the fodder production for all these animals.
	Daily weight gain	Weight at end minus weight at start divided by duration of fattening period expressed in g per day.
	(Dairy) Calf	Young animal of dairy origin between 7 and 120 days of age.
	Dressing percentage	Also carcass yield. Carcass weight divided by live weight when finished animals are slaughtered (weight at slaughterhouse).
	Duration of fattening period, finishing period	Number of days animals stay in the system (age at end minus age at start).
	Meat produced	Total weight of meat added to the animal during the fattening period, expressed as live weight or carcass weight.
	Meat sold	Weight of meat sold at end of fattening period = final weight of the animal, expressed as live weight or carcass weight.
	Net gain	Carcass weight divided by age at slaughter.
	Losses / mortality	Number of animals that die between start and end of the finishing period as a percentage of animals entering the system..
	Weaner (calf)	Animal between 105 and 355 days coming from cow-calf.
	Weight added	Total weight added during finishing period in kg LW.
	Weight at start and end	Live weight when animals enter and leave the system.
	Stocking rate	Livestock units (1 LU = 500 kg live weight) per ha forage area based on average number of animals.
Beef finishing economic data (in alphabetical order)		
	Factor costs	Costs for production factors labour, land, capital (with opportuntiy costs).
	Non-factor costs	All other costs (total costs less factor costs).
	Non-beef returns of the beef enterprise	By-products of the beef production like skin, horns and manure and direct payments, if any.
	Returns of the beef enterprise	Sales of beef cattle, direct payments minus balance in livestock inventory plus other returns of the beef enterprise.
	Total cost of the beef enterprise	All costs of the beef enterprise. The relevant part of overhead and fixed costs on whole farm level were allocated to the beef enterprise.

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Cow-calf

Nr.	Name of variable	Explanation / definition
Cow-calf enterprise production system (in alphabetical order)		
	Age at first calving	Months of age when heifers have their first calf.
	Calf and feeder price	Average calf and feeder prices of calendar year 20XX (exc. VAT) expressed per 100 kg live weight.
	Calf losses (mortality) (%)	Number of calves that die between birth and weaning as a percentage of total calves born.
	Calving percentage (%)	Number of calves alive within 24 hours after birth as a percentage of total cows.
	Cost of the cow-calf enterprise	All costs of the cow-calf enterprise. The cow-calf enterprise as a part of the whole farm includes all beef cows, breeding bulls, calves and replacement heifers and the fodder production for all these animals.
	Replacement rate (%)	Number of cull cows plus number of cows died as a percentage of total cows.
	Total live weight sold per cow and year	Total live weight of weaners, cull cows, cull heifers and breeding animals sold per year divided by the total number of cows.
	Weaning percentage	Number of calves weaned (born minus losses) per 100 cows and year.
	Weight at weaning	Live weight at the day of weaning. This weight is taken as the sale or transfer weight of the weaners.
	Total live weight sold	Sum of the weight of cull animals (cows, bulls, surplus heifers), breeding animals (surplus heifers), weaner calves and adult animals sold or transferred to the beef finishing enterprise per year.
	Total live weight sold per cow	Total live weight sold divided by the number of cows.
	Stocking rate	Livestock units (1 LU = 500 kg live weight) per ha forage area based on average number of animals.
Cow-calf enterprise economic data (in alphabetical order)		
	Animal purchases	Cost for buying animals for the cow-calf enterprise from outside the farm, for example breeding bulls, replacement heifers.
	Approximation of feed costs (AFC)	Calculated as feed cost (purchase feed + fertiliser, seed and pesticides for won feed production) + machinery cost (machinery maintenance + depreciation + contractor) + fuel, energy, lubricants and water + land cost (land rents paid + opportunity cost own land).
	Beef / calf and feeder price	Average beef / calf and feeder prices in the year considered.
	Beef price	Average beef price per carcass weight in the year considered.
	Calf/weaner/backgrounder prices per 100 kg live weight	Farm gate sale price per 100 kg live weight at the day of weaning.
	Calf/weaner/backgrounder prices per head	Farm gate sale price per head at the day of weaning.
	Factor costs	Costs for production factors labour, land, capital (with opportuntiy costs).
	Non-factor costs	All other costs (total costs less factor costs).
	Weaner and transfer to beef receipts	Receipts from weaners sold and weaners and other animals (i.e. cows) transferred to the own beef finishing enterprise.

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Sheep (ewe)

Nr.	Name of variable	Explanation / definition
Sheep (ewe) enterprise production system (in alphabetical order)		
	Age at first lambing	Months of age when hoggets have their first lamb.
	Cost of the ewe enterprise	All costs of the ewe enterprise. The ewe enterprise as a part of the whole farm includes all sheep and the fodder production for all these animals.
	Lambs alive after one day (per ewe)	Number of lambs alive within 24 hours after birth per ewe.
	Lambs marked (per ewe)	Lambs marked as a proportion of the total number of ewes. This variable is used in those farms where lambs are not seen/controlled before marking.
	Lamb losses (mortality) (%)	Number of lambs that die between birth and weaning as a percentage of total lambs born.
	Number of lambs weaned per 100 ewes and year	(Number of lambs born alive less lamb losses until weaning) / total number of ewes.
	Replacement rate (%)	Number of cull ewes plus number of ewes died as a percentage of total ewes.
	Total live weight sold per ewe and year	The sum of slaughter lambs, store lambs, proportional cull ewe, cull young ewes and breeding animals live weight.
	Weaned lambs per 100 ewes and year	Number of lambs weaned (no. born minus losses).
	Weaning age (days)	Age at the day of weaning.
	Weaning percentage	Number of calves weaned per 100 cows and year.
	Weaning weight (kg)	Live weight at the day of weaning.
	Total live weight sold per ewe	Sum of the live weight of lambs, cull animals (ewes, rams, surplus young ewes), breeding animals sold or transferred to the beef finishing enterprise per year divided by the number of ewes.

Glossary of terms used in agri benchmark

Country page

Nr.	Name of variable	Explanation / definition
Inventories, production and consumption		
	Total cattle	Total number of dairy cows, suckler cows, replacement heifers dairy, replacement heifers beef / suckler-herd, calves dairy, calves beef / suckler-herd, cattle on feed, breeding bulls.
	Suckler-cows	Cows used only to produce beef calves (contrary to dairy cows).
	Cattle on feed	All cattle which are kept for the purpose of finishing and slaughter. They do NOT include cull animals. Calculated as total cattle herd - dairy cows - beef cows - replacement heifers dairy herd - replacement heifers cow-calf herd - calves which are not weaned yet.
	Replacement heifers dairy herd	Calculated based on replacement rates and age at first calving.
	Replacement heifers cow-calf herd	Calculated based on replacement rates and age at first calving.
	Production (million head)	Number of animals annually slaughtered in the country.
	Production ('000 tons)	Beef productions in carcass weight.
	Production (kg per head)	Carcass weight of one animal. Calculated as production ('000 tons) divided by production (million head).
	Extraction rate (%)	Production (million head) divided by total cattle.
	Consumption ('000 tons)	Beef consumption in thousand tons in the country.
	Population (million)	All the human inhabitants.
	Consumption (kg per capita)	Beef consumption per capita per year. Calculated as consumption ('000 tons) divided by population.
Trade		
	Export ('000 tons)	Total quantity in thousand tons of beef sent to another country.
	Export (USD million)	Total value in USD of beef sent to another country.
	Import ('000 tons)	Total quantity in thousand tons of beef received from another country.
	Import (USD million)	Total value in USD of beef received from another country.
Beef and livestock prices		
	Beef prices	Price without VAT paid for 1 kg of carcass weight or live weight.
	Livestock prices	Price paid for 1 kg of live weight or per head.