5.5 Breeder birds Toolkit

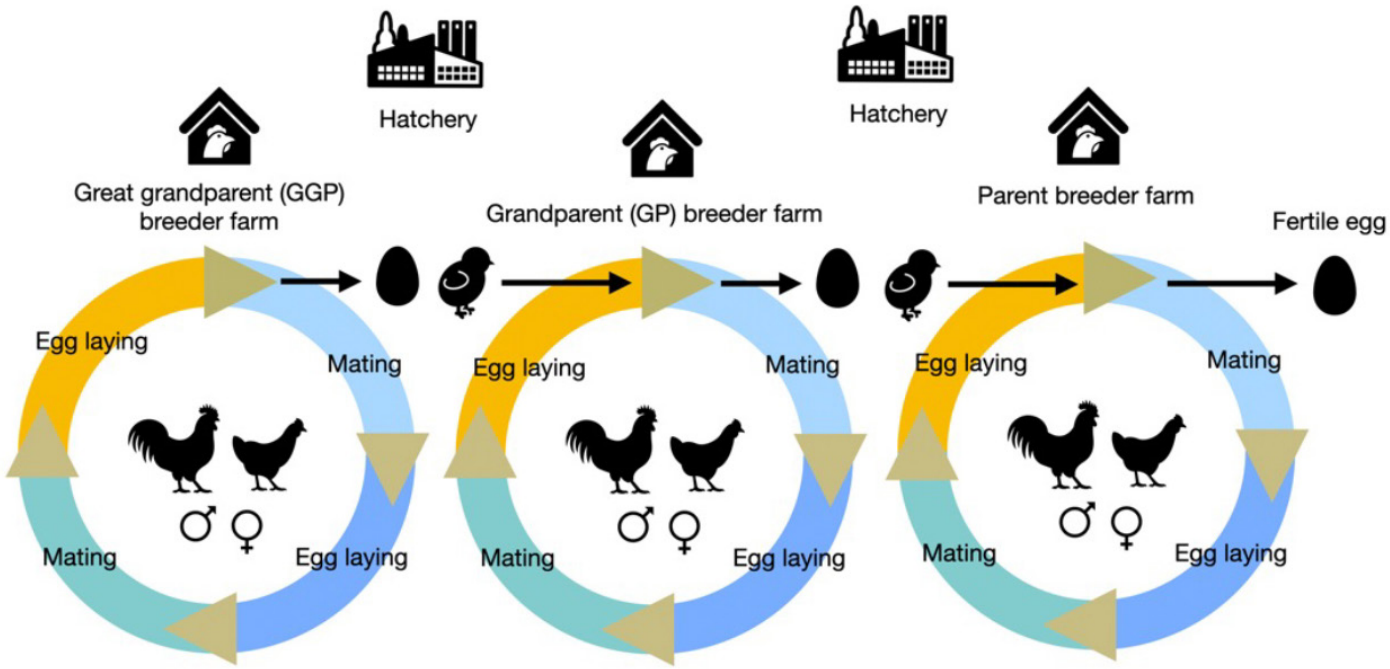
Introduction

Chickens were first domesticated at least 8,000 years ago from several species of jungle fowl in southeast Asia, moving north into China and across central Asia, then into Europe. Today, the chicken is ubiquitous, being farmed in huge numbers on every continent. The FAO suggests there are 16 billion laying hens worldwide, and each year, at least 60 million meat-producing (broiler) chickens are reared. Chickens have been increasingly bred for either laying eggs or producing meat, resulting in distinctly different-looking birds. Chickens can live for up to ten years, but breeder chickens will usually be killed after about 70 weeks. Chickens will spend time preening (cleaning and grooming their feathers), and this is augmented where possible by bouts of dustbathing, on average once every two days. Wild or feral chickens will form into small social groups of up to 15 individuals, with a dominant male and several hens and subordinate males. Chickens are highly motivated to forage, spending large proportions of their day scratching about and foraging, even in the presence of abundant food.

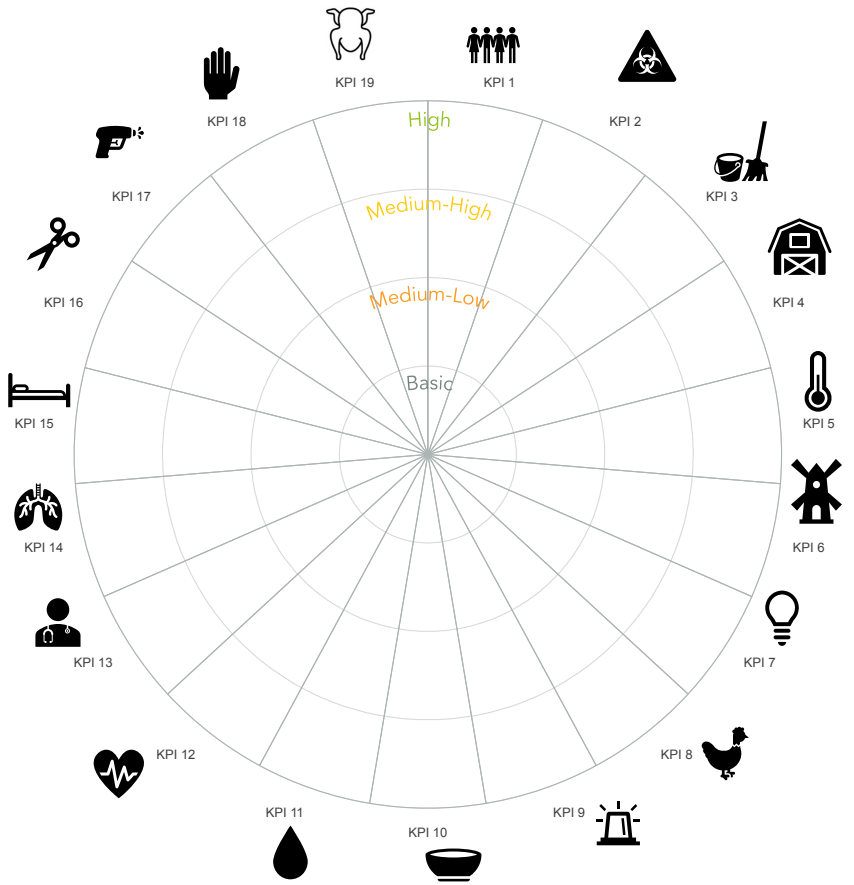
Breeder birds are the female and male of *Gallus gallus* (usually in a ratio of about 1:8 to 1:10, male:female) which are put together to mate and to produce fertile eggs. Males and females are reared on separate farms and brought together from about 20 weeks of age. In many systems, the male birds are provided with reduced feed quantity to prevent them from becoming overweight and lame, but this does induce chronic hunger in these birds. In most commercial systems, fertile eggs are incubated in a specialist system (the hatchery), and chicks hatching from these eggs are taken to the final production farm at one day old (day-old-chicks, DOC). Multiple generations of high genetic merit birds (great-grandparent, grandparent, parent) are necessary to produce the large numbers of chicks required (see figure below for the breeder bird farming cycle).

Welfare issues of breeder birds include: beak trimming; other mutilations (toe and comb cutting); feet, beak and feather conditions; damage to the feathers and skin of females from repetitive mating; high mortality and culling rates in male breeder birds; hunger in male breeder birds; handling, catching and transport to slaughter; and non-stun slaughter.

Breeder bird farming cycle



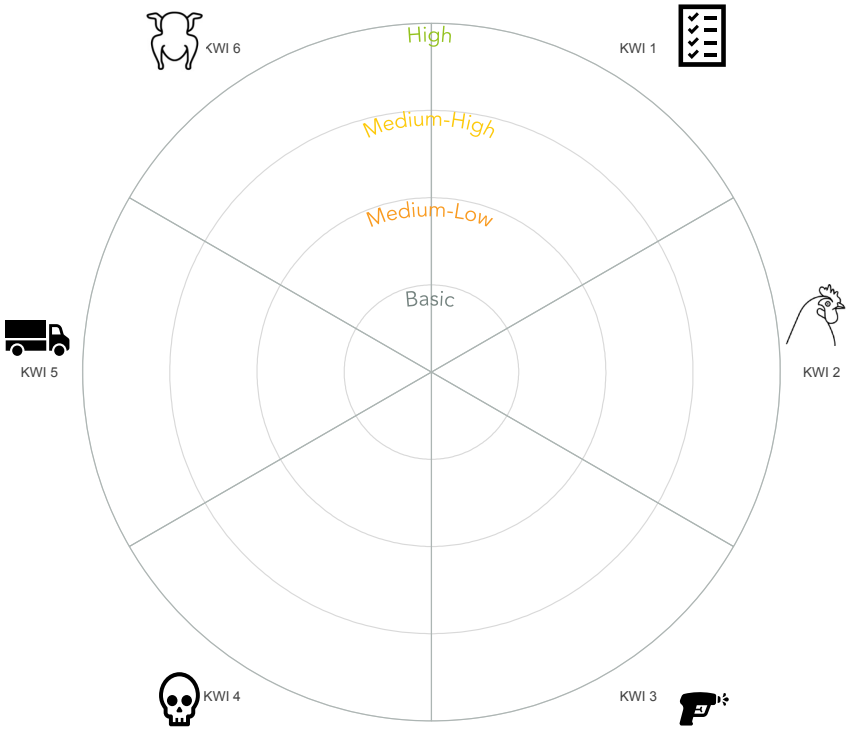
KPI	Achievement
KPI 1: People, training - Links to P1, P11	
KPI 2: Biosecurity - Links to P5, P11	
KPI 3: Cleaning and disinfection - Links to P5, P11	
KPI 4: Farm environment: physical - Links to P4, P5, P6, P9	
KPI 5: Farm environment: temperature - Links to P4, P9	
KPI 6: Farm environment: ventilation - Links to P4, P9	
KPI 7: Farm environment: light - Links to P6	
KPI 8: Farm environment: stocking density - Links to P4, P6	
KPI 9: Farm environment: emergency - Links to P7, P10, P11	
KPI 10: Feed - Links to P3	
KPI 11: Water - Links to P3	
KPI 12: Health, and health planning - Links to P8	
KPI 13: Medicines - Links to P5, P11	
KPI 14: Ammonia (NH3), dust, humidity - Links to P4, P5	
KPI 15: Litter, bedding - Links to P4	
KPI 16: Mutilations - Links to P5, P6, P7	
KPI 17: Euthanasia - Links to P5, P7	
KPI 18: Catching - Links to P7	
KPI 19: Slaughter - Links to P7, P11	



Basic level not achieved	
Basic (B)	
Medium-Low (ML)	
Medium-High (MH)	
High (H)	

Overall KPI achievement	

KWI	Achievement
KWI 1: Animal records, checking - Links to P10	○
KWI 2: Beak trimming, feather loss - Links to P5, P6, P7	○
KWI 3: On-farm culls - Links to P5	○
KWI 4: On-farm mortality - Links to P5	○
KWI 5: Transport mortality - Links to P5, P10	○
KWI 6: Slaughter - Links to P5, P11	○



Basic level not achieved	
Basic (B)	
Medium-Low (ML)	
Medium-High (MH)	
High (H)	
Overall KWI achievement	

Overall achievement

Overall achievement	

KPI Breeder 1

People, training - Links to P1, P11		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	All people responsible for the care of breeder chickens should have received appropriate training by others with appropriate experience, who can demonstrate sufficient knowledge of animal behaviour, general signs of diseases, and indicators of poor animal welfare.	○		○		
Medium-Low (ML)	People handling animals are trained in handling techniques, emergency killing procedures and biosecurity.	○		○		
	Routine procedures should not cause injury, panic, lasting fear or avoidable pain or distress, and where painful procedures cannot be avoided, they should be carried out by competent and trained people.	○				
Medium-High (MH)	An animal welfare contact person or co-ordinator, responsible for animal welfare aspects within the farm or company, is identified.	○		○		
	The animal welfare contact person has received training in animal welfare aspects.	○				
High (H)	People in the company are supported to have higher-level training or achieve professional qualifications in animal care and animal welfare.	○		○		

KPI Breeder 2

Biosecurity - Links to P5, P11		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	The breeder house has surfaces that allow for effective cleaning.	○		○		
Medium-Low (ML)	A biosecurity programme or plan (Resource 7) is in place.	○		○		
	Access to houses is limited and visitors adhere to strict biosecurity requirements specific to the farm being visited.	○				
	Facilities (including feed and litter storage areas) are constructed to limit the entry of pathogens, pests, and animals that could transmit diseases to birds.	○				
Medium-High (MH)	All staff and visitors shower on- site and are provided with a full complement of protective clothing.	○		○		
	If vehicles are brought onto site, then they are sprayed (wheels as a minimum) at the gateway.	○				
	The biosecurity program includes a risk assessment (which may be based on hazard analysis and critical control point (HACCP) training) of the primary pathogens and parasites that are likely to pose a risk to the flock.	○				
High (H)	Hand washing and sanitisation is available on entry to each house.	○		○		
	Feed silos are located at the site perimeter, so that feed vehicles do not need to enter the site.	○				

KPI Breeder 3

Cleaning and disinfection - Links to P5, P11		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Vermin are controlled through appropriate and effective measures, and only approved pest control substances or chemicals permitted by law are used.	○		○		
	The construction of accommodation, pens and equipment can be thoroughly cleaned and disinfected.	○				
Medium-Low (ML)	Written cleaning and disinfection protocols are implemented.	○		○		
	A list of permitted disinfectants and detergents used on the farm, and their safety data sheets, is available.	○				
	Internal house equipment, water tanks and silos are cleaned at house cleaning.	○				
	The areas around the buildings are kept clear of debris and non-essential equipment.	○				
Medium-High (MH)	Vegetation is kept short and is well managed so as not to offer shelter to wild birds or rodents.	○		○		
High (H)	A microbiological testing programme for house hygiene is in place for a targeted sample of company farms each year, and there is a policy for feeding results back to the farm and the cleaning teams.	○		○		
	The most humane effective baiting method is adopted, and pest control baits are only accessible to the targeted species.	○				

KPI Breeder 4

Farm environment: physical - Links to P4, P5, P6, P9		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Floors, surfaces, fittings, equipment and other facilities in and around the shed are designed, constructed, operated and maintained to minimise the risk of smothering, injury, trapping, or disease, and are free from rough edges and sharp protrusions.	○		○		
	Any cage system provides opportunity for comfortable resting and normal movement, and expression of a range of normal species behaviours including scratching, nesting and perching.	○				
Medium-Low (ML)	A non-cage system is employed to enable greater freedom of movement and opportunities to express natural behaviours.	○		○		
	Animals are protected from predators, vermin, and excessive noise.	○				
	Housing is constructed to minimise fire risk, and firefighting equipment and smoke detectors are installed, with capacity to escape the building in an emergency.	○				
Medium-High (MH)	As previous requirement.	○		○		
High (H)	As previous requirement.	○		○		

KPI Breeder 5

Farm environment: temperature - Links to P4, P9		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Heating and cooling systems are capable of producing enough heat or cooling to ensure that birds do not get too hot or too cold.	○		○		
Medium-Low (ML)	Automatic equipment for temperature control is fitted with alarms that warn immediately of equipment failure.	○		○		
	Heating and cooling systems essential for bird health and welfare are checked daily for proper operation.	○				
Medium-High (MH)	Records of daily maximum and minimum shed temperatures (at bird height) are kept on file and available for review.	○		○		
	House temperatures are controlled to maintain the temperature range recommended by the breeder or veterinarian.	○				
High (H)	Houses are equipped with means of controlling relative humidity.	○		○		
	A choice of temperature/environment is provided to enable birds to maintain individual thermal comfort.	○				

KPI Breeder 6

Farm environment: ventilation - Links to P4, P9		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	The ventilation equipment supports birds in both extreme hot and cold weather, manages air exchange, air quality and dust, and ensures bird comfort.	○		○		
Medium-Low (ML)	Automatic equipment for ventilation is fitted with alarms that warn immediately of equipment failure.	○		○		
	Automatic equipment for ventilation has a back-up power supply that is tested weekly.	○				
	Ventilation systems essential for bird health and welfare are checked daily for proper operation.	○				
Medium-High (MH)	As previous requirement.	○		○		
High (H)	As previous requirement.	○		○		

KPI Breeder 7

Farm environment: light - Links to P6		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Light levels are at the legal base requirement.	○		○		
	If no legal requirement exists, then adequate levels of light are provided for carers to observe animals, and for the animals to carry out daytime behaviours.	○				
	Dark rest periods are provided.	○				
Medium-Low (ML)	A minimum of 8 hours of natural or artificial light must be provided in a 24-hour period.	○		○		
	Light is provided at a minimum of 10 lux.	○				
Medium-High (MH)	The daily lighting pattern is recorded.	○		○		
High (H)	As previous requirement.	○		○		

KPI Breeder 8

Farm environment: stocking density - Links to P4, P6		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Where stocking density is legislated, the legal specification is followed.	○		○		
	All birds have sufficient space to walk, turn around, preen, sit undisturbed, flap, stretch wings, and access feed and water without undue competition.	○				
Medium-Low (ML)	Stocking density is not above 25kg/m2.	○		○		
	Birds are not kept in cages.	○				
Medium-High (MH)	As previous requirement.	○		○		
High (H)	As previous requirement.	○		○		

KPI Breeder 9

Farm environment: emergency - Links to P7, P10, P11		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Written plans are in place to deal with emergencies such as fire, power failure, flooding, accidental injuries, freezing, failure of water and feed supply, or chemical or effluent spillage.	○		○		
Medium-Low (ML)	Contacts and emergency phone numbers, and contact numbers in cases where the emergency can affect human health, are available at each site.	○		○		
	If generators are used for back-up power, they are tested under conditions of load at least 4 times a year.	○				
Medium-High (MH)	The emergency plan includes approved methods of humane killing and mass depopulation, with each method having an SOP containing instructions for implementation, equipment requirements, training, safety, biosecurity and environmental aspects.	○		○		
	The methods proposed are consistent with national law.	○				
High (H)	Plans have been developed in consultation with a specialist veterinarian and are updated annually, to cover circumstances such as animals infected with a potentially zoonotic or notifiable disease.	○		○		

KPI Breeder 10

Feed - Links to P3		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	The feed is of a quantity and quality to maintain normal health and productivity, to prevent prolonged hunger or malnutrition, and is suited to the animals' age and needs.	○		○		
	Feeders meet manufacturers' recommendations, good poultry husbandry practices and local regulatory requirements, and must provide adequate access for all birds.	○				
Medium-Low (ML)	Feeder space allowance is 10cm per feeder side per breeding female for troughs.	○		○		
	Feeder space is 7cm per bird for pan feeders.	○				
	In breeder flocks, if female feeders are fitted with male excluders, this is in line with legislation.	○				
	Separate male feeders are provided, and male birds are fed in line with legal requirements and the breeder bird performance guide.	○				
Medium-High (MH)	Feeders are spaced so that birds do not have to move more than 4m to reach a feeder.	○		○		
High (H)	EFSA's Scientific Opinion on broiler breeders indicates "there is substantial evidence that this feed restriction has negative effects on broiler breeder welfare. The consequences of the severe feed restriction include chronic hunger" (see Resource 10).	○		○		
	Feed restriction is avoided by management methods and genetic selection of breeder birds which do not require feed restriction.	○				

KPI Breeder 11

Water - Links to P3		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Water is of a quantity and quality to maintain normal health, and to prevent dehydration.	○				
	Drinkers meets manufacturers' recommendations and local regulatory requirements, and must provide adequate access for all birds.	○		○		
	Drinking systems essential for bird health and welfare are checked daily for proper operations.	○				
Medium-Low (ML)	Drinker bells: 1 bell per 100 birds.	○				
	Drinker nipples and cups: 1 nipple or cup per 20 birds.	○		○		
	1 large drinker cup per 40 birds.	○				
	Drinker height is checked daily, and water spillage is avoided.	○				
Medium-High (MH)	Water is tested every 6 months to ensure potability to FAO standards (see Resource 10).	○				
	Each house has a water meter, and daily consumption is recorded.	○		○		
	Unexpected changes in water consumption are investigated.	○				
High (H)	The emergency supply of water has sufficient capacity to supply the site for 24 hours at maximum demand.	○		○		

KPI Breeder 12

Health, and health planning - Links to P8		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	A procedure is in place to deal with an outbreak of important transmissible disease, including geographically appropriate OIE-listed and notifiable diseases.	○		○		
Medium-Low (ML)	Infectious, parasitic and metabolic diseases, injury, and conditions causing distress, are prevented and controlled through good management, good animal care, biosecurity, vaccination and genetic selection.	○		○		
	The farming system does not depend on prolonged or routine use of pharmaceuticals.	○				
Medium-High (MH)	A H&W plan is in place (Resource 6).	○		○		
High (H)	The H&W plan is reviewed and updated annually and is authorised by a specialist veterinarian.	○		○		
	Consideration is given to genetic influences on health impacts and the potential to grow breeds that demonstrate high welfare outcomes.	○				

KPI Breeder 13

Medicines - Links to P5, P11		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Any drugs or other agents used to treat animals shall be compliant with all local guidelines and applicable local legislation.	○		○		
	Hormones and antibiotics are not used as growth promoters.	○				
	Preventive (prophylactic) use of antimicrobials is not permitted.	○				
Medium-Low (ML)	An antimicrobial reduction programme is in place (see World Vet, Resource 10).	○		○		
	Antimicrobials and other medicines are used responsibly to protect both human and animal health.	○				
	Vaccines and medicines are stored securely and in the recommended conditions (label instructions).	○				
	Medicine use is recorded (Resource 5).	○				
	The company has access to a veterinarian experienced in breeder bird care.	○				
	Any antimicrobial classified as being of 'high' or 'medium' importance for human medicine defined as Highest Priority Critically Important Antimicrobials (HPCIA) is not permitted for use in poultry, unless under veterinary advice.	○				
Medium-High (MH)	Persons using medicines have relevant experience and training.	○		○		
High (H)	An antimicrobial stewardship plan is in place, and is complied with (see OIE 2016, Resource 10).	○		○		
	The plan is reviewed annually, and is linked to existing regional or national antimicrobial stewardship schemes.	○				

KPI Breeder 14

Ammonia (NH_3), dust, humidity - Links to P4, P5		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Ammonia is measured if the levels appear to be noxious to humans.	○		○		
Medium-Low (ML)	Ammonia is tested at the end of the flock cycle, or if levels appear to be rising. Ammonia is below <25ppm when measured at bird head height.	○		○		
	The cause of high ammonia is rectified.	○				
Medium-High (MH)	If dust levels are recognised to be causing negative impacts on bird health and welfare, steps are taken to reduce dust (from feed, litter and ventilation).	○		○		
	House humidity at bird level is measured and recorded.	○				
High (H)	The target for NH_3 levels is <10ppm.	○		○		

KPI Breeder 15

Litter, bedding - Links to P4		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Litter provision is at the legal base requirement.	○		○		
	Where no legal definition exists, in non-cage systems some new litter material is provided for each flock cycle.	○				
Medium-Low (ML)	In non-cage systems the poultry house floor is completely covered in litter to a minimum average depth of 50mm/2 inches.	○		○		
	Birds have continuous access to litter (unless, for chicks ≤7 days old in sheds where chick paper is used).	○				
Medium-High (MH)	Litter is maintained and poor litter is replaced when required.	○		○		
	Where litter beetles are present, they are controlled.	○				
High (H)	Litter is of quality sufficient to encourage dustbathing and foraging.	○		○		
	Litter quality is measured and recorded using a recognised litter scoring scale.	○				
	When litter score falls below targets set by the company, steps are taken to improve the litter quality during the flock cycle.	○				

KPI Breeder 16

Mutilations - Links to P5, P6, P7		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Beak trimming is performed by, or in a system managed by, trained, competent stockpersons.	○		○		
Medium-Low (ML)	As previous requirement.	○		○		
Medium-High (MH)	Where beak trimming is performed, infrared systems are used.	○		○		
High (H)	Beak trimming is not carried out and birds have excellent feather cover.	○		○		

KPI Breeder 17

Euthanasia - Links to P5, P7		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Animals are euthanased by adopting local legally-approved methods.	○				
	Sick or distressed animals are isolated and treated promptly, or euthanased humanely without delay, if treatment is not feasible or recovery is unlikely.	○		○		
	People responsible for euthanasia have received appropriate training.	○				
Medium-Low (ML)	Any equipment used for euthanasia is maintained in good working order, and records documenting maintenance are kept.	○		○		
Medium-High (MH)	A written policy for euthanasia is produced by working with a veterinarian, and is based on recognised best international practice.	○		○		
High (H)	Gas killing used in emergency or disease control situations has approval from the appropriate local government agency.	○		○		

KPI Breeder 18

Catching - Links to P7		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Catching is carried out by trained people.	○				
	Animals which are sick, weak, injured, or known to be diseased, are not transported. They are humanely euthanased on-site.	○		○		
	Picking up or suspending birds by a leg, wing or tail is prohibited.	○				
Medium-Low (ML)	Catching is scheduled to minimise the time to slaughter as well as to minimise climatic stress during catching, transport and holding.	○				
	Water withdrawal does not exceed 1 hour prior to the start of catch for that house.	○				
	Maximum feed withdrawal time is 12 hours (feeders are empty/raised, to the scheduled time of slaughter).	○		○		
	Feed is not be withdrawn from breeder birds more than 9 hours before the expected catching time.	○				
Medium-High (MH)	Animals are handled using low-stress methods, equipment, and facilities that calm animal movement.	○				
	The person responsible for the birds (the farmer) is present at depopulation.	○				
	If mechanical catchers are used, they are designed, operated and maintained to minimise injury, stress and fear to the birds.	○		○		
	Birds are slaughtered as close as possible to the farm of origin, and as soon as possible after arrival.	○				
	Water is available up to catching.	○				
High (H)	Birds are handled singly, in an upright position, held by both legs and with the torso supported.	○		○		

KPI Breeder 19

Slaughter - Links to P7, P11		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	A recognised method to induce immediate insensibility is adopted at slaughter (see Introduction, Section 3.5 regarding stunning).	○				
	Animals are slaughtered adopting local legally-approved methods.	○				
	The slaughterhouse is aware of stunning as a welfare issue.	○				
	Stunning and killing is conducted by an appropriately trained and competent person.	○		○		
	Any equipment used for euthanasia is maintained in good working order and is appropriate for the designated use, and records documenting maintenance are kept.	○				
	Electro-immobilisation is not used.	○				
Medium-Low (ML)	As previous.	○		○		
Medium-High (MH)	Percentage of birds not effectively rendered immediately insensible is recorded and actions taken to reduce to a minimum.	○				
	Company is moving away from use of electrical waterbath stunning, and towards gas or LAPS systems (beneficial for both welfare and quality reasons).	○		○		
High (H)	Internationally-recognised best practice methods for slaughter are adopted (see Resource 10, and standards in Resource 8).	○				
	Non-electrical stunning systems are used.	○		○		

KWI Breeder 1

Animal records, checking - Links to P10		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Records are kept of:	○				
	Number of birds placed, and date placed	○		○		
	Age of birds placed	○				
Medium-Low (ML)	Records are kept of:	○				
	1. Daily mortality	○				
	2. House temperature (max/min, measured at bird height)	○		○		
	Flock inspection is carried out at least twice daily.	○				
	Stockmen walk within 3m of every bird and encourage them to move.	○				
Medium-High (MH)	Records are kept of daily culls (with reason, if known).	○		○		
High (H)	Records are kept of staff observation/checking times within the poultry house.	○		○		

KWI Breeder 2

Beak trimming, feather loss - Links to P5, P6, P7		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	The farmer is aware of beak trimming, injurious pecking and feather loss as a welfare issue for both the birds being pecked and those performing the pecking.	○		○		
Medium-Low (ML)	Beak trimming is performed only to prevent high levels of feather loss.	○				
	Monitoring of feather loss occurs and if levels are high (>20%) management changes are undertaken to reduce risk (such as improving foraging opportunities).	○		○		
	All culls/mortality due to cannibalism are recorded.	○				
Medium-High (MH)	Beaks are trimmed and low levels of feather loss are achieved. Trials of untrimmed hens are undertaken as part of a transition to permanently not trimming.	○		○		
High (H)	Beaks are untrimmed and the prevalence of feather loss at the end of lay is low (<10%).	○				
	Proactive monitoring for feather loss of a representative sample of >100 birds is performed at least 4 times during the lay period.	○		○		
	The company sets high targets, measures performance and reports on lameness outcomes.	○				

KWI Breeder 3

On-farm culls - Links to P5		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Only mortality (not cull) data collected.	○		○		
Medium-Low (ML)	Daily cull number is collected and recorded.	○		○		
	(Cull is actively humanely killed for health or welfare reason, Mortality is 'found dead').	○				
Medium-High (MH)	Both cull data is analysed, and the cause of adverse trends is investigated, and acted upon – suggested thresholds for investigation are total cull > 1.5%.	○		○		
High (H)	A written plan is in place to respond to sudden increases in culling.	○		○		
	The plan includes veterinary consultation and actions to address the problem where necessary.	○				

KWI Breeder 4

On-farm mortality - Links to P5		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Daily mortality data is recorded. Mortality is defined as 'found dead', whereas cull is defined as 'actively, humanely killed for health or welfare reason'.	○		○		
Medium-Low (ML)	If flock mortality exceeds 5% over the flock life, the cause is investigated.	○		○		
Medium-High (MH)	If mortality exceeds 0.3% in a 24-hour period, the cause is investigated.	○		○		
High (H)	A procedure is in place to investigate unexplained mortality.	○		○		
	If morbidity and mortality levels increase, and other signs indicate that the flock has been affected by disease, a diagnostic investigation is conducted to identify the causative agent.	○				

KWI Breeder 5

Transport mortality - Links to P5, P10		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	Dead on arrival (DOA) at slaughterhouse is calculated and recorded.	○		○		
Medium-Low (ML)	DOA at slaughterhouse <0.5%.	○		○		
Medium-High (MH)	DOA at slaughterhouse <0.25%.	○		○		
High (H)	The company has a written plan in place to respond to negative changes in DOA, over any 24h period.	○		○		
	The company sets high targets, measures performance and reports on outcomes.	○				

KWI Breeder 6

Slaughter - Links to P5, P11		Observed?	Comment on observation	Achieved level?	Progress	Evidence/comment
Basic (B)	A recognised method to induce immediate insensibility is adopted at slaughter (see Introduction Section 3.5 regarding stunning).	○				
	Animals are slaughtered by adopting local legally approved methods.	○				
	The slaughterhouse is aware of stunning as a welfare issue.	○				
	Stunning and killing is conducted by an appropriately trained and competent person.	○		○		
	Any equipment used for euthanasia is maintained in good working order and is appropriate for the designated use, and records documenting maintenance are kept.	○				
	Electro-immobilisation is not used.	○				
Medium-Low (ML)	Staff are trained in, and able to explain, how to: check an animal has been properly stunned; check for signs of consciousness and unconsciousness: and know what to do if an animal hasn't been properly stunned.	○				
	At least 1 welfare contact person or co-ordinator, sometimes known as an Animal Welfare Officer) is appointed to have specific knowledge, training and responsibility for welfare during slaughter.	○		○		
	Maximum stun-to-start of bleed intervals of 15 seconds are adopted.	○				
Medium-High (MH)	Percentage of birds not effectively rendered immediately insensible is recorded and actions taken to reduce to a minimum.	○		○		
High (H)	Internationally-recognised best practice methods for slaughter are adopted.	○		○		

Notes: Breeder birds

Assurewel: Laying hens

AssureWel: The AssureWel Approach to Improving Farm Animal Welfare: The Development and Use of Welfare Outcome Assessments in Farm Assurance

BBFAW Investor Briefing (August 2015): How are Investors Using the Business Benchmark on Farm Animal Welfare?

BBAFW Investor Briefing (November 2017): How Companies Are Using the Business Benchmark on Farm Animal Welfare

BBFAW: The Business Benchmark on Farm Animal Welfare Report 2019

British Veterinary Association: Farm Assurance Schemes Infographic

Canadian National Farm Animal Care Council (2016): Codes of Practice, Chickens, Turkeys and Breeders

Compassion in World Farming, Strategic Plan 2013–2017, For Kinder, Fairer Farming Worldwide

COUNCIL DIRECTIVE (EC) 1099/2009 on the protection of animals at the time of killing

COUNCIL DIRECTIVE (EC) 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives EEC 64/432/EEC and 93/119/EC and Regulation (EC) 1255/97

COUNCIL DIRECTIVE 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes

COUNCIL DIRECTIVE 1999/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens

COUNCIL DIRECTIVE 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes

CSIRO Publishing (2001): Model Code of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments

DEFRA (2018): Code of Practice for the Welfare of Laying hens and Pullets

European Bank for Reconstruction and Development: Sub-sectoral Environmental and Social Guideline: Poultry Farming

EFSA (2012): Scientific report updating the EFSA opinions on the welfare of broilers and broiler breeders

FAO: Water Quality for Livestock and Poultry

FAWC advice on animal sentience (10 June 2019)

FAWC: Evidence and the welfare of farmed animals - part 2: evidence based decision making (19 July 2018)

FAWC advice on space and headroom allowances for transport of farm animals (17 September 2013)

FAWC report on farm animal welfare: health and disease (29 November 2012)

FAWC opinion on contingency planning for farm animal welfare in disasters and emergencies (15 March 2012)

FAWC advice on sustainable intensification of livestock agriculture (3 February 2012)

FAWC report on education about farm animal welfare (15 December 2011)

FAWC report on economics and farm animal welfare (7 December 2011)

FAWC opinion on osteoporosis and bone fractures in laying hens (14 December 2010)

Gov UK: The Welfare of Farmed Animals (England) Regulations 2007

Gov UK: Animal Welfare Act 2006

IFC (2014): Good Practice Note: Improving Animal Welfare in Livestock Operations (2014)

Edgar, J.L.; Mullan, S.M.; Pritchard, J.C.; McFarlane, U.J.C.; and Main, D.C.J.: Towards a 'Good Life' for Farm Animals: Development of a Resource Tier Framework to Achieve Positive Welfare for Laying Hens

OIE: Terrestrial Animal Health Code (2019)

OIE Terrestrial Animal Health Code (2019): Chapter 7.5, Slaughter of Animals

OIE: The OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials (2016)

Red Tractor Chicken Standards: Broiler and Poussin Standards Version 4.2 (updated 2019)

Red Tractor Chicken Standards: Indoor Enhanced Welfare Version 1 (2020)

Red Tractor Chicken Standards: Hatchery Version 4.1 (updated 2019)

Red Tractor Chicken Standards: Breeder Layers Version 4.1 (Updated 2019)

Red Tractor Chicken Standards: Breeder Replacements Version 4.1 (Updated 2019)

RSPCA (2017): Welfare standards for laying hens

RSPCA (2017): Welfare standards for hatcheries (chicks, poults and ducklings)

RSPCA (2018): Welfare standards for pullets (laying hens)

RSPCA (2017): Welfare standards for meat chickens

Share Action: What we do

SPCA Certified (2017): Standards for the raising and handling of broiler chickens

SPCA Certified (2017): Standards for the raising and handling of egg-laying hens

Vet Sustain (2019): The Veterinary Sustainability Goals

Welfare Quality Network: Assessment Protocols

WHO: Water Safety and Drinking Water Quality Guidelines

World Bank Group: General Environmental, Health and Safety (EHS) Guidelines, (April 2007)

World Vet Antimicrobial Stewardship: McDonald's Corporation – Vision for Antimicrobial Stewardship in Food Animals (March 2015)