Annex 27

Explanatory Notes on ‘Five Domains’ model prepared by

the WOAH Animal Welfare Collaborating Centres

Animal welfare risk assessment and animal welfare impact underpins the development of animal welfare standards

• Animal welfare standards need to be underpinned by robust assessment of the animal welfare impacts (or opportunities) that arise from the farming system under study.

• The Five Domains Model is one framework for the systematic assessment of animal welfare benefits and compromise in the physical, health, behavioural and mental domains, and hence offers a way of systematically reviewing the literature and determining animals’ physical, health and behavioural needs.

Five Domains is well-established as model for systematic evaluation of animal welfare impacts to promote animal welfare in operations.

• Throughout its 25-year history, the Model has been regularly reviewed and updated to include the latest developments in animal welfare science.

• Since its development, it has been used globally (see Appendix One) to assess the welfare of a range of species, including livestock species, in a range of situations with the purposes including fundamental and applied biomedical, veterinary, agricultural, ecological, welfare and other approved investigations.

• The Model has been adopted by several businesses and organisations as a way of understanding animal welfare, and to support the assessment of animal welfare on farm, in research (the laboratory or elsewhere) and other settings including horse racing, livestock export, zoos and for retailer consumer guarantees about animal welfare (Annex I).

• As such, it supports the verification or monitoring of animal welfare to satisfy the requirements of assurance schemes and legislative or other standards.

• It is used to assess animal welfare state in animal cruelty cases, and to support prosecutions. For example, Dr Rebecca Ledger has had over 100 successful prosecutions in Canada using the Model.

• The Model can also be used to support end-of-life decisions in a range of settings.

Five Domains supports capacity building

• The Model is a useful approach to understand animal suffering and positive states to support training of veterinary services staff, including staff involved in enforcement and

• monitoring, for example veterinary staff at slaughter premises and animal welfare inspectors or enforcement staff.

• The model supports the assessment of human-animal interactions, which allows gap analysis identify areas where professional development or other upskilling is needed.

References

Five Domains: 138 scientific papers found in Web of Science Aug 2021

Originating from (non-exhaustive sample): New Zealand, Australia, UK, Colombia, Brazil, Romania, Germany, Denmark, Canada.

Examples of recent papers include:

Mellor, D.J.; Beausoleil, N.J.; Littlewood, K.E.; McLean, A.N.; McGreevy, P.D.; Jones, B.; Wilkins, C. The 2020 Five Domains Model: Including Human–Animal Interactions in Assessments of Animal Welfare. Animals 2020, 10, 1870. https://doi.org/10.3390/ani10101870

Mellor, D.J. Operational Details of the Five Domains Model and Its Key Applications to the Assessment and Management of Animal Welfare. Animals 2017, 7, 60. https://doi.org/10.3390/ani7080060

Mellor, D.J., NJ Beausoleil, KE Littlewood, AN McLean… The 2020 five domains model: Including human–animal interactions in assessments of animal welfare. Animals

Sherwen, S.L.; Hemsworth, L.M.; Beausoleil, N.J.; Embury, A.; Mellor, D.J. An Animal Welfare Risk Assessment Process for Zoos. Animals 2018, 8, 130. https://doi.org/10.3390/ani8080130.

**Appendix**

Organisations that refer to 5 Domains on website (a non-exhaustive sample as at Aug 2021):

Humaneness (https://www.mpi.govt.nz/dmsdocument/4009/direct)

MPI website – Animal Use Statistics (https://www.mpi.govt.nz/dmsdocument/1477/direct) (harm assessments of RTT under Animal Welfare Statistics Regulations use 5 Domains)

Fonterra (https://www.fonterra.com/au/en/embracing-sustainability/our-commitments/animal-wellbeing.html)

World Association of Zoos and Aquariums (https://www.waza.org/)

Animal Heath Australia (https://animalhealthaustralia.com.au/livestock-welfare/)

Australian Government Department of Agriculture, Water and the Environment https://www.agriculture.gov.au/animal/welfare/aaws/humaneness-of-pest-animal-control- methods

Landcare Research Manaaki Whenua/TB Free/Ospri (https://www.bionet.nz/assets/Uploads/Possum-Control-and-Animal-Welfare.pdf)

Scottish Animal Welfare Commission references the 5 domains in their report on the use of rodent glue traps (https://www.gov.scot/publications/scottish-animal-welfare- commission-report-use-rodent-glue-traps-scotland/documents/)

Dairy NZ (https://www.dairynz.co.nz/animal/welfare/)

Four Paws (https://www.four-paws.org/campaigns-topics/topics/science-and-research/animal-welfare-assessment-framework)