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A Biblical Perspective on Stewardship in the Context of Modern Livestock Production Practices

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Agriculture links mankind to creation—and, by extension, to the Creator—in a more intimate fashion than nearly any other human endeavour. For most of human history, this connection was a shared experience for nearly all people, because producing food occupied the time and energies of the vast majority of the population. Since the advent of the Industrial Revolution, however, the proportion of people directly involved in agricultural production has been steadily declining.

Today, particularly in the developed world, only a small percentage of citizens have any direct connection to agricultural production. The US Department of Agriculture reported that in 2014 agricultural production accounted for only 1.4% of all US employment.

The dramatic modern increase in agricultural production efficiency has provided tremendous benefits to society as a whole. The release of untold millions of individuals from the daily

endeavour of food production has liberated immense human capital for other pursuits, from the creation of art to employment on a factory floor to the invention of computer microprocessors. Indeed, modern civilization has been largely founded on the phenomenal success of humankind in food production.

Because fewer people have a direct hand in agricultural production, new questions about agricultural practices have emerged. Although the improvements in productivity are indisputable—agriculture today yields unprecedented levels of output relative to the land and labour inputs involved—modern practices are increasingly inscrutable to those outside the industry.

Nevertheless, it is clear to all concerned, from the farm manager immersed in the day-to-day business of farming to the urban food consumer, that modern agricultural production bears little resemblance to the historic

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archetype of the farm, at least as traditionally envisioned. In fact, modern farming is about as far removed from farming's romanticized history as modern communication is from the Pony Express.

The most dramatic changes to occur in agriculture since mankind first domesticated the major plant and animal species have taken place over the last two generations as increasingly sophisticated mechanization, chemical inputs, genetic modifications and information technology have transformed commercial agriculture practices. Given this rapid revolution in agricultural production, Christians need to re-evaluate what it means to participate in agriculture in a God-honouring way. This is particularly true with respect to animal production, where high-intensity, large-scale production systems now dominate the meat, egg and dairy industries.

Addressing this issue fairly and honestly requires an understanding of agriculture that goes beyond mere technical issues. It requires an understanding of the role of agriculture in the created order and an appreciation of how humankind might bear the image of God in the practice of agriculture in general (and in livestock production, specifically) so as to communicate God's truth to the world and bring Him glory. These issues constitute the subject of this paper.

I. Agriculture and the Cultural Mandate

God's revelation to mankind first describes Him as creative: 'In the beginning, God created the heavens and the earth' (Gen 1:1). Although biblical

revelation indicates that God spoke the world into existence (Heb 11:3), it is also clear that his bringing forth creation involved something of a process. Traditionally, theologians have identified an order in the creative process within the economic Trinity: creation exists by the will of God the Father, through the mediating word of God the Son, by the agency of God the Holy Spirit.¹

Beyond the issue of intra-Trinitarian order, it is also clear that by the will of God, creation unfolded in physical time and space. At the very least, the six days of creation imply an orderly process. Moreover, Genesis 2 gives a more definite sense of God's active, creative processes within the world that he had made: watering the earth (v. 6), forming man (v. 7), planting a garden (v. 8) and making plants grow (v. 9).

Notably, we also see that mankind, the pinnacle of God's earthly creatures (Ps 8:5–8), is assigned an active role in the creative process—namely, an opportunity to participate with God by 'subduing' (Gen 1:28) the earth as his 'image-bearing co-regents'.² Genesis 1:28 is often referred to as the cultural mandate. Exactly what this mandate entails for humanity in relation to the rest of the created order has been the subject of much study and debate. Mankind's call to rule over nature has generally been considered at least

1 J. Lanier Burns et al., 'From Dust to Dust', in *Exploring Christian Theology*, vol. 2: *Creation, Fall, and Salvation*, eds. Nathan D. Holsteen and Michael J. Svigel (Minneapolis, MN: Bethany House, 2015), 23; Wayne Grudem, *Systematic Theology* (Grand Rapids: Zondervan, 1994), 266–67.

2 Grudem, *Systematic Theology*, 24.

one constituent part of man's role in bearing the image of God. In Anthony Hoekema's formulation, man's dominion over nature is part of the *functional* aspect of bearing God's image (that is, what man does to reflect God's image) in contrast to the *structural* aspect, or how man reflects God's image ontologically or in his very being.³

Viewed though a contemporary lens, terms like 'subdue' and 'have dominion over' are easily misinterpreted as carrying connotations of exploitation if not outright abuse. Those connotations, of course, do not necessarily reflect the intrinsic meaning of the terms. Certainly, such an understanding of the cultural mandate is at odds with the purposes of a God who, it has been suggested, created the world out of an overflow of his intra-Trinitarian love.⁴

Traditional understandings of the cultural mandate have often focused on mankind's responsibilities. For example, Hoekema connects the Hebrew terms in Genesis 1:28 with the command 'to serve' and 'to care for' God's creation, noting that 'Adam, in other words, was not only told to rule over nature; he was also told to cultivate and care for that portion of the earth in which he had been placed.'⁵ Similarly, Victor Hamilton compares the use of the terms 'subdue' and 'have dominion over' in Genesis 1:28 with other uses of this terminology in the Old Testament, concluding that the terms give implicit

but clear direction for care and responsibility, not exploitation.⁶ Charles Ryrie specifically links the cultural mandate to agriculture, noting that the term 'subdue' comes from a Hebrew root meaning 'to knead' or 'to tread', which he interprets as a rather clear reference to cultivation or tillage.⁷

Overall, scholarship on the cultural mandate presents a balanced view of mankind's exercise of dominion over nature through responsible stewardship as an integral aspect of reflecting the image of God.⁸ Alister McGrath summarizes this perspective by viewing mankind's role in creation as 'an affirmation of *responsibility* and *accountability* towards the world in which we live' (emphasis in original). In this light, agriculture is rightly understood as a God-ordained activity through which humanity can obediently live out God's instruction and reflect his character and his glory. Although, obviously, we cannot create things *ex nihilo* or impart life to the inanimate work of our hands, the practice of agriculture does afford humanity the opportunity to emulate, in a finite sense, the various dimensions of creativity displayed by the infinite, triune God: conceiving, implementing and beautifying.

The practice of agriculture, along with every aspect of creation, was affected by humanity's fall into sin. In fact, agriculture is singled out for special treatment in Adam's curse:

3 Anthony A. Hoekema, *Created in God's Image* (Grand Rapids: Eerdmans, 1986), 69.

4 Michael Reeves, *Delighting in the Trinity: An Introduction to the Christian Faith* (Downers Grove, IL: IVP Academic, 2012), 43.

5 Hoekema, *Created in God's Image*, 79–80.

6 Victor P. Hamilton, *Handbook on the Pentateuch*, 2nd ed. (Grand Rapids: Baker Academic, 2005), 28.

7 Charles C. Ryrie, *Basic Theology* (Chicago: Moody, 1999), 232.

8 Alister E. McGrath, *Theology: The Basics* (Chichester, UK: Wiley-Blackwell, 2012), 46.

‘Cursed is the ground because of you; in pain you shall eat of it all the days of your life; thorns and thistles it shall bring forth for you; and you shall eat the plants of the field. By the sweat of your face you shall eat bread, till you return to the ground’ (Gen 3:17–19).

The centrality of agriculture within the pronouncement of God’s judgement on Adam hints at its centrality in Adam’s pre-Fall role within creation. Hamilton, in arguing for the redemptive character of the sentences handed down by God, notes that with these curses God places ‘at the respective point of highest self-fulfilment in the life of a woman and man problems of suffering, misery, and frustration. These “sentences” are not prescribed impositions from a volatile deity. Rather, they are gifts of love, strewn in the pathway of human beings to bring them back to God.’⁹ In other words, God’s judgement impacted Adam’s practice of agriculture (i.e. dominion through responsible stewardship) because that was precisely the activity that should have been most fulfilling for him—the means through which he most clearly imaged his Creator.

With the Fall, the image of God in mankind was fundamentally marred. Hoekema describes the situation after the Fall as one in which man retains the structural sense of God’s image (i.e. God’s image is still intrinsic to who man is) but has lost its functional sense (i.e. God’s image is not well reflected, if at all, in what man does).¹⁰ Every activity of mankind is therefore subject to corruption because of the

Fall, making us constitutionally incapable of functioning fully in accordance with the image of the perfect Creator. This result has clear implications for the practice of agriculture. Hoekema powerfully describes the implications of sin for mankind’s relationship to the rest of creation:

Instead of ruling the earth in obedience to God, man now uses the earth and its resources for his own selfish purposes. Having forgotten that he was given dominion over the earth in order to glorify God and to benefit his fellowmen, man now exercises this dominion in sinful ways. He exploits natural resources without regard for the future: stripping forests without reforestation, growing crops without crop rotation, failing to take measures to prevent soil erosion. His factories pollute rivers and lakes, and his chimneys pollute the air—and nobody seems to care.¹¹

Hoekema’s assessment is essentially accurate, albeit somewhat hyperbolic. In many times and places, people have indeed cared very much about soil erosion or deforestation or pollution. Today, many people care passionately about eliminating environmental pollution even if they fail to acknowledge the existence of a transcendent Creator, let alone their role as his image bearers. But Hoekema correctly observes that in all times and places, mankind since the Fall has faced a grave temptation to be exploitative, to destructively manipulate the created order for his own (mostly short-term) gain. Those who work in agriculture are not exempt

⁹ Hamilton, *Handbook on the Pentateuch*, 43.

¹⁰ Hoekema, *Created in God’s Image*, 83.

¹¹ Hoekema, *Created in God’s Image*, 85.

from this temptation. In fact, because of their intimate familiarity with the natural world, they may well experience this temptation most acutely.

II. Biblical Stewardship and Modern Agricultural Practices

Any view of agriculture is strongly conditioned by broader cultural values. Consequently, there is no single perspective on agriculture to which we may appeal universally. Modern Western cultures have generally held the practice of traditional agriculture in high esteem. 'Traditional' agriculture has meant the small-scale production of a diversity of products, relying on natural methods and practices performed by family members who reside on the family farm.

This traditional notion of agriculture is commonly contrasted with industrialized agriculture, in which intensive production takes place in monoculture on a massive scale using highly specialized (often synthetic) inputs, a high level of technology, and reliance on a pool of hired labourers and managers. Critiques of these modern industrial agricultural methods are abundant in number and comprehensive in scope. A recent report by the International Panel of Experts on Sustainable Food Systems (IPES-Food) includes a representative itemization of complaints:

Today's food and farming systems have succeeded in supplying large volumes of foods to global markets, but are generating negative outcomes on multiple fronts: widespread degradation of land, water and ecosystems; high GHG [greenhouse gas] emissions; biodiversity losses; persistent hunger and micro-

nutrient deficiencies alongside the rapid rise of obesity and diet-related diseases; and livelihood stresses for farmers around the world.¹²

Whereas the IPES-Food report focuses primarily on the ecological and sociological impacts of modern farming practices, others have drawn attention to the animal welfare implications of modern, large-scale animal production. Housing systems that confine animals to relatively small, unnatural spaces that limit movement and may impair expression of instinctual behaviours have come under particular scrutiny. Some states have passed legislation to ban certain confinement systems for chickens in egg production.¹³

Numerous corporations within the food service industry have committed to phasing out the use of products from facilities using close-confinement systems for chickens and hogs. Not coincidentally, some of the largest integrated agricultural firms in the world (including Tyson Foods, Smithfield and Rose Acre Farms) have committed to eliminating the use of certain close-confinement systems in their US farm operations.¹⁴

¹² IPES-Food, *From Uniformity to Diversity: A Paradigm Shift from Industrial Agriculture to Diversified Agroecological Systems*, ed. Emile A. Frison and Nick Jacobs (Brussels: International Panel of Experts on Sustainable Food Systems, 2016), 3.

¹³ The American Society for the Prevention of Cruelty to Animals (ASPCA) maintains a current list of state bans on various animal confinement systems at www.aspc.org/animal-protection/public-policy/farm-animal-confinement-bans.

¹⁴ For a current listing of firms at various points in the supply chain (farm, processing, retail, food service) that have made public

In the past, the general public rarely raised questions about agricultural production practices, but today these practices have become a pressing moral issue for some people. For example, Jonathan Anomaly has proposed policy interventions aimed at curbing 'morally repugnant' practices in modern animal production.¹⁵ Such strong denunciations of widely employed commercial practices would have been considered radical and highly inflammatory until quite recent times.

Not surprisingly, proponents of modern agricultural practices have pushed back against Anomaly's moral condemnations. Norwood and Lusk's provocative response is typical of practitioners in the field of commercial agriculture:

Does the idea that food may come from a business with hired labor and a mechanized, streamlined production system make eating dinner less appealing? Do you think food produced on factory farms is less safe, less tasty, less nutritious, or less humane? Before answering, consider this thought experiment. Do you prefer that your medicine be made in a modern, sophisticated factory environment, or do you prefer buying from a married couple who drive to the city once a week to sell their homemade medicine?¹⁶

commitments related to animal housing practices, see 'Corporate Commitments on Farm Animal Confinement Issues', <http://cagefreefuture.com/wp/commitments/>.

15 Jonathan Anomaly, 'What's Wrong with Factory Farming?' *Public Health Ethics* 8, no. 3 (2015): 250.

16 F. Bailey Norwood and Jayson L. Lusk, *Compassion by the Pound: The Economics of Farm Animal Welfare* (New York: Oxford Uni-

Norwood and Lusk's thought experiment effectively highlights a marked inconsistency in how consumers view food relative to other contemporary mass-produced consumer items, from medicine to cell phones.

Of course, a major difference between consumer views of medicine and of food is that food production is explicitly tied to notions of stewardship—not only of land and water but also of living, breathing, feeling animals. Norwood and Lusk acknowledge this important distinction between food and other consumer goods. They rightly point out, however, that animal husbandry practices have not been imposed by corporate fiat but have evolved in response to market signals originating in the freely made decisions of consumers.¹⁷

This is no small point. There has been no conspiracy by evil industrialists to push ethically dubious practices on an unsuspecting public. Rather, consumers in many cultures around the world have demanded a high volume and variety of consistent, low-cost foods, and companies have responded to the market signals thus created. Furthermore, contract farmer-growers have enthusiastically embraced these systems as a means of achieving economic stability and sustainability in their agricultural vocation.

Of course, recourse to market signals as an explanation of companies' behaviour does not offer moral absolutism to either producers or consumers. After all, robust markets of willing buyers and sellers incentivize the

versity Press, 2011), 37.

17 Norwood and Lusk, *Compassion by the Pound*, 38.

illegal drug trade, along with many other morally questionable and overtly exploitative activities from gambling to pornography to slavery.

To justify agricultural stewardship practices, we must appeal to a more rigorous, more normative standard of morality than simply the existence of a functioning market. By the same token, from the standpoint of biblical morality, condemning modern practices requires an appeal to a more rigorous standard than pre-industrial practice. After all, farmers prior to the Industrial Revolution were in no less a fallen state than modern farmers.

With respect to the stewardship of animals, Hiuser concludes that 'industrial animal production' is ethically problematic because it fails to respect farm animals' *logoi*—'the divine ideas or wills that God has for each created thing'.¹⁸ To Hiuser, industrial animal production systems have three problems. First, such farms fail to help animals realize their *logoi*. Second, as a result, we fail to realize our own *logoi* as God's image bearers. Finally, we are actively undermining the *logoi* that God has in mind for animals.¹⁹

Hiuser's theological argument is consistent with the rationale usually offered in support of traditional agricultural practice (as opposed to industrial practice). Rollin summarizes the basic philosophy: 'Farmers once put animals into an environment that the animals were biologically suited for

and then augmented their natural ability to survive and thrive by providing protection from predators, food during famine, water during drought, help in birthing, protection from weather extremes and the like.'²⁰ The basic idea to which both Rollin and Hiuser appeal is that animals in production agriculture settings should still be able to behave in a manner consistent with their essential natures.

But what is an animal's essential nature? The question of what constitutes essential behaviour has been central to the debate over animal production practices for some time. Those who advocate for intensive, technology-based, confinement systems argue that as long as animals are safe, well-fed, warm and dry, their needs are adequately met. The notion that animals require, or desire, something akin to emotional fulfilment through expressive behaviours is dismissed as misplaced anthropomorphism.

Moreover, advocates of modern commercial agriculture regard as a dangerous instance of moral equivalency the notion that agricultural production efficiency should be compromised for the sake of something as inscrutable as animal emotions. After all, significant reductions in production based on debatable notions of animal well-being will ultimately hurt people—particularly those at the margins of society who will be most severely affected by the resulting reduction in availability and increase in food prices.²¹

¹⁸ K. Hiuser, 'Maximizing Animal Theology: Maximus the Confessor on the Value of Non-Human Animals and the Human Calling', *Toronto Journal of Theology* 30, no. 2 (2014): 248.

¹⁹ Hiuser, 'Maximizing Animal Theology', 252.

²⁰ Bernard Rollin, 'Farm Factories', in *The CAFO Reader*, ed. Daniel Imhoff (London: Foundation for Deep Ecology, 2010), 10.

²¹ The charge of moral equivalency against the animal welfare movement does have some

On these terms, discussion of animal welfare issues in agriculture typically devolves into a stalemate, with each side encamped on its own moral high ground—animal welfare advocates championing humane treatment of animals and commercial agriculture advocates stressing food for the poor. Wendell Berry, however, thoughtfully stakes out a middle ground: ‘Agriculture must mediate between nature and the human community, with ties and obligations in both directions. To farm well requires an elaborate courtesy toward all creatures.’²²

Berry thus rejects an either/or view of farm animal care versus food production in favour of a both/and philosophy; instead, we must be concerned about feeding the world *and* about caring well for our animals and all our natural resources. Viewed next to Berry’s notion of ‘elaborate courtesy’, the normal preoccupation with meeting minimum standards of care begins to look suspiciously self-serving. As Matthew Scully observes, ‘It’s not a good sign when arguments are turned to precisely how much is mandatory and how much, therefore, we can manage to avoid.’²³

credibility, as the movement has often argued from the principle of the moral equivalence of animals and people. For example, one advocate claims, ‘To create meaningful change [in animal agriculture production practices] we must see animals and nature as our equals.’ Christopher Manes, ‘Man, the Paragon of Animals?’ in *The CAFO Reader*, ed. Daniel Imhoff (London: Foundation for Deep Ecology, 2010), 52.

²² Wendell Berry, ‘Renewing Husbandry’, in *The CAFO Reader*, ed. Daniel Imhoff (London: Foundation for Deep Ecology, 2010), 50.

²³ Matthew Scully, ‘Fear Factories’, in *The CAFO Reader*, ed. Daniel Imhoff (London: Foundation for Deep Ecology, 2010), 18.

If appropriate animal care is viewed as a reasonable obligation for farmers, an understanding of God’s nature and of man’s responsibility to reflect that nature can be a useful clarifying concept. One of the more intriguing aspects of God’s character revealed in Scripture is expressed in the Hebrew term *hesed*. Oswalt describes the somewhat enigmatic aspect of this particular divine quality, noting that it defies a clear English translation and, further, that it lacks clear parallels in other Semitic languages. Oswalt suggests that a rather obscure Hebrew word was adapted to express an understanding of love that was unique among ancient Semitic cultures.²⁴

Seeking to more clearly delineate the concept, Oswalt defines the connotations of *hesed*, observing that it ‘conveys the idea of the intentional kindness, generosity or loyalty of a superior to an inferior, especially when it is undeserved’.²⁵ Garrett locates the unique aspect of *hesed* within the bonds of covenant relationship: ‘The quality of *hesed* is not simply a matter of fulfilling one’s duties to a covenant obligation; it is going beyond legal obligations to give kindness freely to those with whom one relates.’²⁶

Although God’s *hesed* is generally directed toward people (in particular, the covenant people Israel), this aspect of God’s character is in some sense di-

²⁴ J. N. Oswalt, ‘God’, in *Dictionary of the Old Testament: Wisdom, Poetry & Writings*, ed. T. Longman III and P. Enns (Downers Grove, IL: IVP Academic, 2008), 247.

²⁵ Oswalt, ‘God’, 247.

²⁶ D. A. Garrett, *Hosea, Joel*, vol. 19A of *The New American Commentary* (Nashville, TN: B & H Publishers, 1997), 109.

rected toward all creation. In Psalm 36, God's demonstration of steadfast love (*hesed*) to creation seems to be explicitly in view: 'Your steadfast love, O Lord, extends to the heavens, your faithfulness to the clouds. Your righteousness is like the mountains of God; your judgements are like the great deep; man and beast you save, O Lord' (vv. 5–6). Commenting on how God is revealed in the Psalms, Oswalt comments, 'God never acts out of keeping with the best interests of the cosmos that he created. Since God is unlimited in power, he certainly could do so, but the psalmists testify in wonder that this God of *hesed* never does.'²⁷

The quality of *hesed* is of considerable utility as a guide to God-honouring creation care and has particular relevance to animal agriculture. Man stands in dominion as the pinnacle of earthly creatures. We are also stewards of an ancient relationship between livestock and people, in which animals occupy a position of obvious vulnerability. Rollin articulates the notion of an 'ancient contract' between people and animals—that is, the symbiotic arrangement intrinsic to traditional animal agriculture in which people care for animals and animal products supply human needs.²⁸ Acting consistently with the image of God in this situation requires the kindness, mercy and faithfulness that characterize God's relations with humankind.

To be sure, some go much further

in delineating man's obligation to animals, even challenging the notion that farm animal production can ever truly be humane. Sarah Withrow King contends, 'Animal welfarists ... will answer that it's ethical to eat animals if they have happy lives and painless deaths. ... I don't think that's good enough for Christians.'²⁹ Instead, King's argument leads her to call for faith-based veganism.

One potential implication of a theologically motivated veganism could be the conclusion that simply improving the living conditions and handling of animals destined for slaughter anyhow is ultimately pointless. King certainly seems to be headed in that direction. However, to abandon potentially meaningful improvements in animal welfare that seem consistent with Christian stewardship as traditionally understood, on the basis of a novel doctrine of stewardship whose biblical and theological foundations remain largely untested, is a questionable step. At a minimum, such an attitude ignores a significant spiritually formative aspect of animal care and dominion (Proverbs 12:10). Whereas the emotional connection between man and animal is often blunted in the production of food animals, most pet owners appreciate this connection intuitively. One must consider whether there is a substantive difference between the life of a farm animal and that of a companion animal. Or, to state it differently, should God's steward and image bearer owe any less care and appreciation to the farm animal than to the companion animal? We

²⁷ Oswalt, 'God', 248.

²⁸ Bernard Rollin, 'The Ethics of Agriculture: the End of True Husbandry', in *The Future of Animal Farming: Renewing the Ancient Contract*, ed. Marian Stamp Dawkins and Roland Bonney (Oxford: Blackwell, 2008), 9.

²⁹ Sarah Withrow King, *Vegangelical: How Caring for Animals Can Shape Your Faith* (Grand Rapids: Zondervan, 2016), 17.

doubt that any reasonable grounds for such a distinction can be found.

III. Applying Christian Principles to Agricultural Practice

Unfortunately, for the Christian agriculturalist, it remains difficult to prescribe which specific animal care standards are consistent with the image of 'this God of *hesed*'. At a minimum, Christians engaging in agricultural practice should maintain a willingness to humbly engage in thoughtful reflection and dialogue concerning the use and care of animals. It should also be possible to identify God-honouring motives in our practice of agriculture.

On this point, some modern animal production practices do indeed appear to have a questionable provenance. Production systems featuring high-intensity confinement of livestock have not arisen primarily because of their superior performance in animal care (or their environmental and community impacts) but rather due to their greater efficiency (i.e. higher productivity per unit of input and, therefore, lower cost per unit of production).

We do not mean to imply that no animal welfare-related justifications for industrial-type management systems are possible. Modern, intensive confinement systems have often been justified on the grounds that animals are healthier and more comfortable and can be better cared for in confinement than in more natural settings. Nevertheless, the *reason* for adopting such systems has been increased efficiency and reduced cost, not any improvement in animal welfare. This conclusion is confirmed by the fact that even

the ostensibly welfare-based justifications for high-intensity systems typically cite metrics related to improved productivity, such as increased feed efficiency. Fraser et al. provide a good discussion of the limitations of this approach to welfare evaluation, which they term a 'functioning-based conception' of welfare.³⁰

In general, animal care considerations have been dealt with in a *post hoc* fashion where livestock production systems have incorporated efficiency-enhancing practices. That is, efficiency has been the driver and animal care standards have subsequently been adjusted to accommodate the new, more efficient practices. Scully comments on this tendency:

We know man as he is, not only the rational creature but also, as Socrates told us, the rationalizing creature. ... The human mind, especially when there is money to be had, can manufacture grand excuses for the exploitation of other human beings. How much easier it is for people to excuse the wrongs done to lowly animals.³¹

For example, laying hens are not kept in battery cages because evidence suggests that they are better off in battery cages (setting aside the question of how 'better off' might be defined). Rather, they are kept in battery cages because production is more efficient in that system compared to the alternatives. Having adopted that system for

30 D. Fraser, D. M. Weary, E. A. Pajor, and B. N. Milligan, 'A Scientific Conception of Animal Welfare That Reflects Ethical Concerns', *Animal Welfare* 6 (1997): 202.

31 Scully, 'Fear Factories', 21.

its higher productivity, we then look for evidence that hens are not suffering in the system. Perhaps they truly are not; their physical performance can be quite impressive in such systems. However, this efficiency-first approach to management decisions is fraught with poor incentives with regard to animal care. Moreover, its driving motivations seem to offer a poor reflection of the character of God whose image we are called to bear.

Our core question—how does one participate in agriculture, and especially in modern, industrial livestock production, in a God-honouring way?—remains difficult to answer definitively. Partisans on both sides generally attempt to reduce the issue to a simple, all-encompassing binary: can Christians work in industrial-scale agricultural production in good conscience or not? Commercial agriculture advocates would, of course, answer with a definitive yes; indeed, they might be offended that the question is asked at all. On the other hand, a rising chorus of ethically motivated vegans would answer with an equally definitive no and would perhaps wonder why there is any need even to debate the issue.

A binary framing of this issue is unlikely to yield constructive dialogue. Instead, it simply encourages the retreat into partisan camps noted earlier. Asking whether Christians can work in industrial-scale agricultural production in good conscience seems analogous to asking whether Christian restaurateurs can sell alcohol in good conscience. Devout believers can disagree in good faith on various aspects of this issue. It is more productive, we think, to look for the positive obligations placed on believers who operate

within this particular marketplace.

As an obvious starting point, Christians should be at the forefront of developing industrial agricultural practices—or alternatives to such practices—that reflect the thoughtful, intentional, responsible stewardship to which we are clearly called.³² In fact, Christian agricultural practitioners who are actively seeking to live out their faith in their professional field should be particularly well-equipped not only to grapple seriously with the moral dimensions of these issues but also to bring relevant expertise to bear on specific problems. They could also serve as honest brokers between contending parties (i.e. between traditional and commercial agriculturalists).

An additional obligation for Christians engaged in agriculture is to engage seriously in agricultural development internationally. If we who live in affluent countries, enjoying the benefits of highly modern commercial agriculture, are truly concerned about feeding and clothing the world's growing population, as well as following the way of Jesus, we should be investing

32 Unfortunately, concern for stewardship of the natural world is now primarily associated with non-Christian (even anti-Christian) worldviews. Mary Poplin identifies and describes three non-Christian worldviews: pantheism, secular humanism and material naturalism. Elements of all three of these views are discernible in the modern environmental movement: reverence for earth as mother (pantheism), the scientism of global warming activists (material naturalism), and the utopianism of the more aggressive environmental quality advocates (secular humanism). Mary Poplin, *Is Reality Secular? Testing the Assumptions of Four Global Worldviews* (Downers Grove, IL: IVP Books, 2014), 28–29.

resources, including the necessary human capital, to assist the poorest countries of the world in developing their own sustainable, self-sufficient agricultural industries. Efforts to expand our own existing operations so as to capture a larger share of anticipated market growth are less obviously motivated by genuine Christian compassion.

As concerned Christians and ministries continue to engage in international agricultural development work, they should carefully consider the theological and spiritual aspects of the agricultural methods and practices that they are establishing as part of that work. It is entirely possible that the developed world's adoption of industrial-scale agricultural methods has blinded us to the notion that our care for and dominion over animals are spiritually formative (Prov 12:10). As animal production practices and standards are transmitted to the developing world, this dimension ought to be considered alongside the more familiar economic, social and ecological concerns.

Of course, Christians should continually seek the guidance of the Holy Spirit, asking God to search our motives and our actions to see if there is anything offensive within us (Ps 139:23–24), which in this context would mean any rationalization of behaving in an exploitative fashion towards God's creation for selfish gain. This last point, of course, is an obligation for all believers whatever their vocation, though it is a particularly crucial discipline for those involved in modern agriculture.

Finally, Christians who take seriously their role as God's image bearers should acknowledge that industrial-

scale agricultural practices can be morally problematic. A desire (even a sincerely held one) to 'feed the world' thirty years hence does not provide licence to manage animals in ways that are exploitative or inherently cruel, to compromise environmental quality, or to impose other negative externalities on surrounding communities. A desire to increase efficiency and maximize profits is even less of a justification. Serious, probing questions about the ethical dimensions of animal production systems should not be met with knee-jerk defensiveness but with a sincere willingness to dialogue on the basis of shared concern to ensure that our production systems are genuinely humane and just.

By the same token, Christians who are sceptical of industrial-scale agricultural practices must begin by presuming both good will and good intentions on the part of their fellow believers who are engaged in such practices. These sceptics should be willing to acknowledge that for the most part, we have grown into these systems in much the same way that we have grown into other aspects of modern life. Even when generally accepted aspects of our culture deserve to be challenged from a Christian perspective, we must recognize that participants in a culture often find it difficult to step outside practices to which they are accustomed and examine them critically.

It is exceedingly rare for human progress to proceed linearly along a path that is both economically and socially optimal. Rather, course corrections are frequently necessary, though seldom easy. In relative terms, we have still had very little time to develop our theology of creation care to address an indus-

trial mode of life, or industrial modes of agricultural production specifically. This generation is in the midst of that theological work. All parties involved in that endeavour should engage in it in good faith, with compassion, great understanding, patience and a healthy measure of Christian charity.

IV. Conclusion

When the Holy Spirit inspired the writers of Scripture to describe the qualities of God, one of the most profound and impactful images employed was that of a shepherd. In Psalm 23, the 'goodness and mercy' (*hesed*) that David anticipated for his life are illustrated by the image of the Lord as a divine shepherd. Jesus referred to himself as the Good Shepherd, willing to sacrifice even his own life for the benefit of his sheep. Of course, these passages are metaphorical descriptions of God. But they communicated clearly and powerfully to people in an agrarian society because those people were familiar not only with the function of shepherds but also with the archetype of a shepherd who would sacrifice himself for his flock. Modern industrial agriculture conveys a far different image for many people.

Contemporary challenges in industrialized agriculture highlight the importance of a faithful Christian witness in the field. As the battles between traditional and industrial agricultural practices multiply, a faithful and thoughtful Christian witness has much to offer. And much is at stake for the church as these issues command increasing attention from the general public. For example, a failure to address and humbly seek to rectify exploitative tendencies in modern agricultural practices will represent a failure to properly reflect the love, mercy and faithfulness of God in our care for creation. On the other hand, an improperly motivated rejection of modern, efficient agricultural practices similarly evinces a lack of concern for those at the margins of society who most intensely experience material need. In either case, the Christian witness may be compromised by unreflective action (or inaction). Christians involved in agriculture should be particularly equipped—and thus bear great responsibility—to navigate these complex issues with both professional competence and personal integrity, serving God and their fellow man well in the process.