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**Transfarmation** 

# TRANSITIONING OUT OF INDUSTRIAL ANIMAL AGRICULTURE

By Shannon Ray



This fact sheet identifies some of the reasons **farmers may want to transition out of animal agriculture**, presents possible pathways for transitioning, summarizes current barriers, and provides an overview of potential solutions to support a just transition for farmers.

Why do we need to help farmers transition from raising animals to growing crops? Industrial animal agriculture has negative impacts on farmers, communities, animals, and the environment.



#### FARMERS:

- Many animal farmers in the United States struggle to make a profit or pay off debt.<sup>1</sup>
- Farmers often raise animals under contract with large corporations, which can be exploitative.<sup>2</sup> Corporations dictate terms of production, such as the equipment farmers must buy to remain under contract, often promising a high level of profit that never materializes, leaving farmers in debt.<sup>3</sup>
- Farmers can face penalties or intimidation for attending union meetings or publicly criticizing working conditions.<sup>4</sup>
- Industrial animal agriculture is largely vertically integrated, which means a single entity, generally a large corporation, owns or controls most stages of production. Vertical integration often creates very unstable business conditions for farmers.



#### THE ENVIRONMENT:

- Animal agriculture is responsible for about <u>15%</u> of global human-caused greenhouse gas emissions.<sup>5</sup>
- It is a leading driver of <u>biodiversity loss</u><sup>6</sup> and <u>deforestation</u>.<sup>7</sup>
- Raising animals for food uses <u>77%</u> of agricultural land, yet farmed animal products provide only 17% of the world's calories and 38% of its protein.<sup>8</sup>
- Production of meat, eggs, and dairy <u>requires more</u> <u>land and generates more greenhouse gas emissions</u> than production of plant foods.<sup>9</sup> Without a large-scale shift from animal agriculture toward plant-based food production, the world will be <u>unable to meet the</u> <u>Paris Agreement target</u> of limiting global warming to 1.5°–2°C above pre-industrial levels.<sup>10</sup>







#### COMMUNITIES:

- Waste from industrial animal farms pollutes air and water, leading to increased rates of illness and infection among people who live near them.<sup>11</sup> Production of animal-based food, including feed crops, is responsible for about 12,700 deaths related to air quality in the United States each year.<sup>12</sup>
- Pollution and odor from industrial animal farms disproportionately impact <u>communities of color</u>.<sup>13</sup>

#### ANIMAL WELFARE:

- Over 80 billion land animals are killed for food each year,<sup>14</sup> and <u>most</u> are raised in industrial farms.<sup>15</sup>
- Animal welfare standards in industrial operations are very low. Animals are generally <u>kept indoors</u> at very high stocking densities, many confined in <u>cages and</u> <u>crates</u> that severely restrict their movement.<sup>16</sup> Animals often suffer chronic pain and other health problems caused by breeding for rapid growth.<sup>17</sup>
- Farmed animals are often transported long distances to slaughterhouses without food, water, or rest.<sup>18</sup>



## Animal agriculture provides a livelihood for many, employing more people than any other agricultural subsector in the United States.<sup>19</sup>

A **just transition** out of animal agriculture for farmers would involve support in finding alternative livelihoods that promote equity and health along with sustainability and animal welfare.<sup>20</sup> Adverse impacts on farmers should be minimized, and planning processes should be inclusive and participatory.<sup>21</sup> Programs like **Transfarmation**<sup>™</sup> provide such support.



#### **TRANSITION PATHWAYS**

In research I conducted at the University of Oxford, former animal farmers in the United States shared paths they took to transition out of animal agriculture.<sup>22</sup>



#### FINDINGS FROM MY RESEARCH:

- Most farmers raising chickens for meat found specialty mushrooms to be the most viable transition pathway.
- Most farmers who transitioned out of animal agriculture also transitioned from industrial production to market gardening and now work in small-scale systems for local markets.
- Transition plans should be tailored to account for a farmer's equipment, infrastructure, land, and geography.
- Some chicken farmers were able to repurpose chicken sheds for plant production, while others installed shipping containers inside them or opted to grow transplants to avoid potential safety concerns.



In addition to the farmers interviewed for this research, Transfarmation farmers have converted chicken operations to <u>crop and specialty-</u> <u>mushroom farms</u><sup>23</sup> and <u>hog farms to mushroom-growing operations</u>.<sup>24</sup>

Other farmers who have transitioned out of animal agriculture have transitioned from <u>hog to mushroom farming</u><sup>25</sup> and <u>cattle ranching to</u> <u>vegetable farming</u>.<sup>26</sup>



### WHAT DOES TRANSITIONING OUT OF ANIMAL AGRICULTURE INVOLVE?

Through testimony from farmers who successfully transitioned out of animal agriculture, my research identified seven steps in a transition, as well as barriers that farmers may face in executing their transition plans. These are presented below, along with possible solutions and resources needed to overcome these barriers.

STEPS	BARRIERS		SOLUTIONS
<b>1.</b> Decision to transition	Lack of motivation to transition	$\rightarrow$	Financial incentives
<b>2.</b> Identifying transition pathway	Lack of knowledge	-	Designated governmental transition programs
<b>3.</b> Drafting business plan and budget	Lack of knowledge	$\rightarrow$	Designated governmental transition programs
<b>4.</b> Repurposing or selling infrastructure or equipment	Unsuitable equipment	$\rightarrow$	Proofs of concept and pathway research
<b>5.</b> Purchasing and setting up new equipment	Lack of funds	$\rightarrow$	Grants and other funding
<b>6.</b> Technical training	Limited external support systems	-	Better-equipped extension offices and transition programs
7. Launching new operation	Lack of income during transition period and launch	$\rightarrow$	Grants and other funding
<b>8.</b> Securing a market for new products	Lack of interest from food businesses and consumers	-	Outreach services for farmers; incentives for businesses to source from transitioning farmers
<b>9.</b> Financial and personal success	Emotional difficulty	$\rightarrow$	Mental health support

#### FINDINGS FROM MY RESEARCH:

- All farmers faced financial obstacles, including loss of income during the transition period and cost of new equipment and infrastructure, such as harvest and wash bins, refrigerated vehicles, heating and cooling equipment, humidity meters, and CO<sub>2</sub> monitors. Total expenses for such equipment averaged \$300,000-\$500,000.
- Most farmers felt that their transitions would have gone more smoothly if they had had access to education and training.
- Most farmers expressed a desire for mental health support.
- Most farmers emphasized the importance of having access to a network of other farmers transitioning out of animal agriculture.

### HOW CAN FARMERS BE SUPPORTED IN A JUST TRANSITION OUT OF ANIMAL AGRICULTURE?

- Financial incentives for farmers to transition
- Debt relief for contract farmers
- Legal assistance for contract farmers
- Financial assistance for equipment and infrastructure, as well as lost income during transition periods
- Development of education and training programs on a range of topics:
  - o Identifying a suitable transition pathway
  - o Drafting a budget
  - o Developing a business plan
  - o Locating a market
  - Repurposing equipment and infrastructure
  - o Operating new equipment and infrastructure
  - Acquiring technical skills needed for new production systems
- Financially equipping extension offices and farmertransition programs like Transfarmation to support transitioning farmers
- Mental health support for farmers



Despite the challenges involved in transitioning out of animal agriculture, **all the farmers who participated in the research felt positively about their decisions to transition**. Two described the decision as the best they had ever made.<sup>27</sup>











#### **ENDNOTES**

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