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ACADEMIC RESEARCH FINDINGS TURNED INTO INFORMATION THAT ADVOCATES CAN GRASP AND USE EFFORTLESSLY

To learn why we launch this program, read the Explanatory Note placed at the end. Feedbacks welcomed. Contact: min@tinybeamfund.org



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Animal agriculture in developing countries: Are governments in the driver's seat?



Each non-high income nation has its own unique blend of political, economic, legal systems, history and culture. For example, Indonesia is a fledgling democracy with the world's largest number of Muslim population. China is governed by the Chinese Communist Party. After the social and economic strides from 2003 to 2014, Brazil's poverty and inequality reduction seems to have stalled.

In spite of these vast differences, academic researchers have found plenty of government fingerprints in animal agricultural sectors of a number of non-high income nations, often (but not always) supporting large-scale operators and capital-intensive agribusinesses.

Can advocates working to disrupt large-scale animal farms and agribusinesses in low- and middle-income countries ignore the role and reach of governments? Can they bypass government activities and rely solely on decreasing consumer demand for animal-based food, on pressuring industrial producers and big corporations in these countries, as their chief intervention strategies?

1. #1 reason for the consolidation of China's dairy sector: The Chinese government restructured the entire industry

In one fell swoop after the notorious 2008 milk scandal, the Chinese government forced small dairy operators to exit. (It was one of the most high-profile and enduring scandals in the Chinese food industry. A well-trusted dairy producer was accused of adding melamine to its milk powder.)

As small-scale dairy farms were supposedly the culprits, the government squeezed them out of the market in order to foster greater food safety and reduce government regulation costs. Vertical coordination became the norm, linking upstream dairy farmers with downstream consumers.

A key mechanism employed by the government is to provide select large dairy firms with subsidies such as "quality control, technology innovation, logistics system, facilities update, etc."

A bit more info:

- “The number of large dairy firms had dropped from 815 to 638 from 2008 to 2015, while the top 20 firms’ productions and sales are more than half of the total industry (Ministry of Agriculture, 2016). The large gets larger. Particularly on the fluid milk, the top three players’ (Yili, Mengniu, and Bright Dairy) outputs account for >60% market share in 2016. . . .”
- “China owns the third largest dairy industry in the world, following the USA and India. . . . Compared to that in 2000, the production of dairy products in 2015 is almost tripled (292%) (National Bureau of Statistics of China, 2018) in which fluid milk increased by 65.3% from 2008 to 2015 (Ministry of Agriculture, 2016). This trend would not be stagnant or reverse in the near future.”

Chen, Yuquan, and Xiaohua Yu. “Do Subsidies Cause a Less Competitive Milk Market in China?” *Agricultural Economics* 50, no. 3 (2019): 303–314. doi: 10.1111/agec.12485



2. Export and trade in animal food products ranks high in the to-do list of some developing countries’ governments

Often one of the key reasons why large-scale production of food animals develops in a middle-income country is because its government is eager to promote export and transnational trade in the animal-based food it produces.

Government representatives are essential participants in such trade. They occupy important seats at the negotiation table as well as perform a myriad of functions to facilitate the trade.

Brazil’s beef trade with China is a good example. The Brazilian agricultural attaché stationed at the Brazil embassy in Beijing, and the director of the Brazilian Trade and Investment Promotion Agency (Apex-Brasil) which has both governmental and private ties, are indispensable in the Sino-Brazil beef trade. And this is a significant trade: Brazil supplied 30% (165,619 tonnes) of China’s total beef imports for 2016.

Susanne, Antônio Domingos Padula, Julio Otávio Jardim Barcellos, Guilherme Pumi, Shudong Zhou, and Funing Zhong. “The Role of Distance on International Commerce: The Impact on Sino-Brazilian Beef Trade.” *Journal of Agribusiness in Developing and Emerging Economies* 8, no. 4 (November 5, 2018): 693–711. doi: 10.1108/JADEE-04-2017-0041



3. Were “progressive” and “left-wing” governments in Latin America great at curbing the power of large agribusinesses in their countries? (e.g. government of presidents Lula 2003-2010 and Dilma Rousseff 2011-2016)

The short answer: “No. Not at all.”

To rein in ag-giants, there must be land reform that addresses the foundation on which the *agronegócio* /agribusiness is built. (Land reform has been for decades – and continues to be – one of the most contentious issues in Latin America. Large latifundio estates remain in the hands of a few. Social movements’ struggle for land reform and a fundamental change to the unjust agrarian system that plagues Latin America is legendary.)

Not only do democratic, left-wing governments not carry out genuine land reform, they actively encourage the expansion of livestock production by agribusinesses in a bid to turn their countries into global agricultural powerhouses.

A bit more info:

- “. . . left-wing governments in Latin America have not significantly transformed the industrial agribusiness-controlled model of agriculture that they inherited from earlier governments. In fact, their policies have been instrumental for its most recent and dramatic expansion across the region. . .”
Vergara-Camus, Leandro, and Cristóbal Kay. “The Agrarian Political Economy of Left-Wing Governments in Latin America: Agribusiness, Peasants, and the Limits of Neo-Developmentalism.” *Journal of Agrarian Change* 17, no. 2 (2017): 415–437. doi: 10.1111/joac.12216
- “By far the most powerful political force hindering progress [in land reform] is the Ministry of Agriculture (MAPA) [in Brazil], not just through its championing of large-scale agribusiness interests and their associated export model, but also through interventions designed to deprive land reform of one of its most valuable tools—an accurate index upon which to calculate land productivity—the ‘rational and appropriate use’ of land.”
Sauer, Sérgio, and George Mészáros. “The Political Economy of Land Struggle in Brazil under Workers’ Party Governments.” *Journal of Agrarian Change* 17, no. 2 (2017): 397–414. doi: 10.1111/joac.12206

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4. Rwanda government’s recent strategy to intensify poultry production has made Rwanda’s poultry industry expand *how many times faster* than the growth in the smallholder poultry sector?

Answer: Seven times faster.

Rwanda is a low-income country with widespread malnutrition. The 40% of its population that lives below the poverty line is dependent on agriculture for income and livelihood.

“The United Nations and the International Monetary Fund have identified livestock development as the key pillar of their poverty reduction strategy in Rwanda. The Rwandan government shares this outlook and developed policies and strategies in 2012 to enhance the nation’s livestock industry – particularly with respect to the poultry sector.”

“A key element of the Rwandan strategy to industrialize and commercialize its livestock production has been a comprehensive program of privatization and liberalization. . . . Rwanda’s agricultural development strategy, investments, and policies have essentially disregarded the village farmers who make up the majority of farmers in the poultry sector. The role and value of smallholder farming systems continues to be neglected, overlooked, and extended little political significance or scientific prestige.”

Chiles, Robert M., and Celize Christy. “Livestock Intensification Strategies in Rwanda: Ethical Implications for Animals and a Consideration of Potential Alternatives.” *Global Meat: Social and Environmental Consequences of the Expanding Meat Industry* (eds. Bill Winders and Elizabeth Ransom), MIT Press, 2019, pp. 167–84. doi: 10.7551/mitpress/11868.003.0019

Special note: Highly recommend reading this entire paper. For free access, go to:

<https://direct.mit.edu/books/book/4570/chapter/203952/Livestock-Intensification-Strategies-in-Rwanda>

- This paper gives advocates sound evidence and reasoning they can use to respond to the argument that in low-income countries such as Rwanda where food insecurity and malnutrition is deadly serious, where poverty reduction is as urgent as can be, the only possible way forward to solve these very real problems is to produce and consume more animal-based food.

- Sneak preview: Critical of the prevailing livestock-oriented approach to solving these problems, the authors put forward alternatives that are viable, don’t have to cost an arm and a leg, and have multiple benefits in addition to not harming animals. For example: Fortify staple food such as beans with essential vitamins and minerals; expand smallholder agroecological cropping (e.g. by providing the necessary know-how, technology, cultivars); boost non-animal agricultural export (e.g. in tea and coffee) and diversify the economy by promoting entrepreneurship and the service sector to aid economic development; invest in girls’ education and public health.

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5. Animal diseases a key challenge in South Africa government's promotion of aquaculture

South Africa prepared an aquaculture development bill in 2018. Its main aim is to alleviate poverty, unemployment, food insecurity – the country's top challenges.

But this bill will not fulfill its objective of promoting the country's aquaculture unless the government can prevent widespread aquatic animal diseases and implement biosecurity measures. This requires "political will and an enabling legislative environment".

A bit more info:

- ". . . aquaculture along with capture fisheries generally contributes to poverty reduction by providing food, income and employment for both producers and the households of other contributors to the aquaculture value chain, either directly, where conditions ensure access to these food commodities through direct production, or indirectly, through trade, exports, labour, levies, taxes and foreign investment."
- "Operation Phakisa is a South African Government initiative. . . . [Its] goals for aquaculture include increasing the revenue generated by the aquaculture sector from ~US\$45 million to ~US\$200 million by increasing the production capacity of the sector by 20,000 tonnes, thereby increasing the role of aquaculture in job creation from 2,227 jobs to 15,000 jobs over a period of five years. In order to achieve these goals, some challenges have to be overcome and these include, amongst others, regulatory barriers, high production costs, access to markets and funding, insufficient skills and human capacity, non-centralised research and insufficient infrastructure in rural areas."
- "The main challenge to improving aquatic animal health in South Africa is the non-centralised nature of the legislative framework, which has resulted in a lack of coordination with respect to mandates and the responsibilities of the supporting agencies and institutions. In addition, specialist expertise, specialised infrastructure for diagnostics and quarantine, improved monitoring and control, diagnostic techniques and extension services have all been identified as pre-requisites for the implementation of a national aquatic animal health strategy."
- "Aquatic animal health awareness is increasing within the region, largely due to recent aquatic animal disease outbreaks. Opportunities therefore exist within the SADC [Southern African Development Community] region to collaborate in terms of capacity development and collectively develop regional networks and diagnostic capacity."

Christison, K. "Building a Sustainable Aquaculture Industry in South Africa: The Role of Biosecurity." *Revue Scientifique et Technique de l'OIE* 38, no. 2 (September 1, 2019): 589–600. doi: 10.20506/rst.38.2.3006

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6. Which one of these governments provides strong support to aquaculture in recent years?

a) Argentina; b) Russia; c) Egypt?

Answer: c) Egypt.

"Development in the aquaculture industry in Egypt has been rapid in the last two decades. . . with remarkable annual growth. . . . This rapid increase is attributed to the shift from extensive and semi-intensive aquaculture towards the intensive aquaculture systems. In addition, this has been supported by the introduction of new technologies for aquafeed production (eg. extruded feed), the application of farm best management practices and the prioritization of aquaculture development sector by the government."

Shalan, Mohamed, Magdy El-Mahdy, Mona Saleh, and Mansour El-Matbouli. "Aquaculture in Egypt: Insights on the Current Trends and Future Perspectives for Sustainable Development." *Reviews in Fisheries Science & Aquaculture* 26, no. 1 (January 2, 2018): 99–110. doi: 10.1080/23308249.2017.1358696

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7. Beef features prominently in government policies in Indonesia. Why?

Indonesia's government has been quite vocal in promoting food/meat self-sufficiency in the past couple of decades, and has developed policies and programs to try to realize this aspiration.

Beef is very important in Indonesians' diet. And beef cattle has long been a key part of Indonesia's animal agriculture, raised mostly by smallholders that have two to three animals. Beef self-sufficiency means the country will not have to depend on imports, especially from Australia.

Hamilton-Hart, Natasha. "Indonesia's Quest for Food Self-Sufficiency: A New Agricultural Political Economy?" *Journal of Contemporary Asia*, July 2019, pp. 1-25. doi:10.1080/00472336.2019.1617890



8. Turkey government's "livestock support" policies increased the number of farm animals

The government of Turkey has been providing varying amounts of support payments to livestock farmers each year. In 2001 the support was 1.5% of the total agricultural support budget; in 2016 it was 29.5% (three billion Turkish Liras).

Analyzing figures from 2004-2014, academic researchers have calculated that "a 1.0% increase in livestock supports leads to a 0.3% increase in animal presence in Turkey". More than half of the livestock farmers are small family businesses.

Erdal, Hilmi, and Gülistan Erdal. "Panel FMOLS Model Analysis of the Effects of Livestock Support Policies on Sustainable Animal Presence in Turkey." *Sustainability* 12, no. 8 (January 2020): 3444. doi: 10.3390/su12083444

EXPLANATORY NOTE:

- Academic studies are notoriously hard to find, read, and put into practical use by non-academics.
- Super-busy advocates cannot afford to spend a lot of time and effort to dig up, digest, and deploy academic research even though they recognize the value of academic studies in informing and improving their advocacy work.
- *Academic Studies Without Tears* aims to help advocates faced with this dilemma.
- Its target audience are leaders and funders of non-profit advocacy organizations addressing the many negative impacts of industrial animal agriculture in low- and middle-income countries.
- It uses a communication style – reminiscent of quiz or news items – that makes everything a breeze to read.
- Each issue focuses on a particular topic and includes 8 – 10 academic studies.
- It goes without saying that the academic studies featured are *not* the final word. They have flaws and limitations. They are just a tiny selection of perspectives and findings for advocates to consider, to whet their appetite. But every relevant data point and nugget of cogent information adds to one's store of knowledge and has the potential to spark new ideas.

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