

# About the environmental impact of crocodile farming

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To this date, there have been very few studies of the environmental impact of farming crocodiles for meat. This is due to the small importance of crocodile meat in global diets compared to other meats such as beef, pork or chicken. Still, it is possible to estimate in what range crocodile farming impacts the environment compared to other sources of food, such as vegetables or other meats.

The below graphs are extracted from Tilman & Clark (2014) and were published in Nature. They respectively display the amount of greenhouse gas (GHG) emitted for one calorie and one gram of protein produced depending on the source.

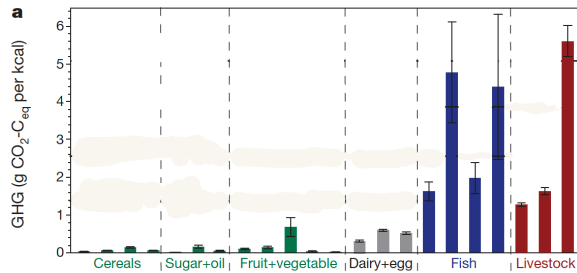


Figure 1: GHG per calorie

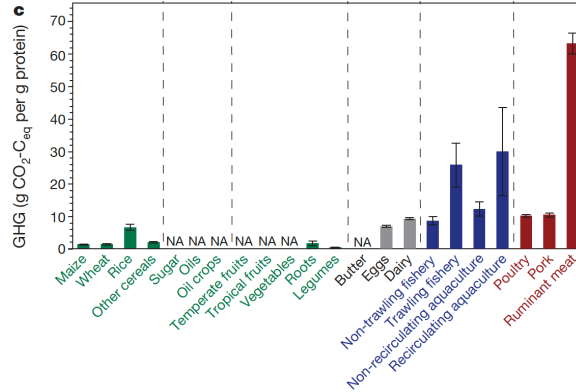


Figure 2: GHG per g protein

It can be noted that any form of animal calorie or animal protein (in red) is more GHG intensive than any form of vegetable calorie or protein (in green). On top, crocodiles are carnivorous and thus fed mainly poultry and fish diets when farmed. Crocodiles are able to convert at best 50% of the food they eat in body mass in their first 33 months of life (McNease & Joanen 1981). It can thus be expected that, at best, 1g of crocodile meat generates two times more GHG than 1g of fish or poultry.

On the other side, some crocodile farm owners have claimed that farming crocodiles helps the species survive the increasing stress put on their habitat by human development. However, Tisdell & Swarna Nantha (2007) do not find evidence supporting this idea. The effect of crocodile farming on the crocodile wildlife is found to be almost null in their study of the Northern Territory of Australia in 2007.

Overall, despite lacking definite and precise evidence, it appears that farming crocodiles does not have a positive environmental impact, especially when compared to plant based alternatives.

## References

- McNease, L. & Joanen, T. (1981), Nutrition of alligators, *in* 'Proc. Alligator Production Conf. Gainesville, Florida', Vol. 1, pp. 15–28.
- Tilman, D. & Clark, M. (2014), 'Global diets link environmental sustainability and human health', *Nature* **515**(7528), 518.
- Tisdell, C. & Swarna Nantha, H. (2007), 'Management, conservation and farming of saltwater crocodiles: an australian case study of sustainable commercial use'.