

Research report

October 2022

EU RESEARCH & ANIMAL SUFFERING

Scrutinizing the Horizon 2020 Programme



The UPF-Centre for Animal Ethics (UPF-CAE) is a think-tank based at Universitat Pompeu Fabra which focuses on animal ethics from multidisciplinary and interdisciplinary perspectives. Its mission is to promote non-speciesist ethical approaches in academia, politics, media and public opinion.

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Summary

- The citizens of the European Union are very concerned by animal suffering and **strongly support** increasing protection for nonhuman animals.
- EU research and innovation funding programmes are the **main public tools for fostering scientific research** in the European Union.
- **Horizon 2020**, the research and innovation programme for the period 2014 to 2020, only supported **54 projects (0.15% of all funded projects)** that directly considered nonhuman animal interests.
- **Horizon 2020** only devoted **0.14% of all its budget** to funding projects with a direct benefit for nonhuman animals.
- It is **urgent** that European Commission research and innovation programmes align with societal concern and scientific awareness by increasing their funding to projects devoted to the protection of nonhuman animals' interests.

1 / Introduction

The citizens of the European Union have displayed great concern for animal suffering, and shown themselves to be in favour of considering the interests and increasing the protection of nonhuman animals. In 2015, 74% of the population agreed that the welfare of companion animals should be better protected, while 82% also agreed that farmed nonhuman animals deserve better protection (European Commission 2016).

In alignment with this trend, the Treaty of Lisbon included the acknowledgement of animal sentience in one of its articles (now Art. 13, Treaty on the Functioning of the European Union). In 2012, the European Citizens Initiative “Stop Vivisection” (<http://stopvivisection.eu/es>), which aimed to abolish animal experimentation, collected 1.17 million signatures. Also in 2012, the Cambridge Declaration on Consciousness stated that “humans are not unique in possessing the neurological substrates that generate consciousness” (Cambridge Declaration 2012). At the academic level, animal ethics has long established that it is not morally acceptable to put animals through situations that can cause them mental or physical harm (Singer 1975; Regan 2004[1983]). It seems clear that European society should continue to expand its moral circle, fully recognizing the ethical consideration of all nonhuman animals. Policies should therefore be designed, and funding allocated, accordingly.

At the UPF-Centre for Animal Ethics, we felt there was a clear need to ascertain the extent to which public EU research and innovation funding programmes are aligned with increasing societal and scientific concern for animal welfare. To this end, we conducted an analysis of the Horizon 2020 programme, the results of which are presented in this report.

Horizon 2020 was the EU key funding programme for research and innovation for the period 2014-2020, with a budget of €77 billion. This programme was preceded by the 7th Framework Programme (2007-2013) and has been succeeded by Horizon Europe (2021-2027). As the main public tool for funding scientific research in the EU, these programmes are a suitable object of study to determine how public funding is distributed across issues and from different perspectives. As the latest concluded programme, Horizon 2020 data for funded projects are available online. For this reason, we chose it as our object of study to ascertain whether the EU research public funding is aligned with societal attitudes and scientific evidence regarding animal suffering and welfare.

2 / Methodology

The ultimate goal of this project was to determine the extent to which the EU public budget is funding research focused on the welfare and protection of nonhuman animals, that is, research aimed at avoiding their suffering and attending to their interests. To this end, quantitative research was conducted on the research projects funded by the **Horizon 2020 Programme**, the research and innovation funding programme for the period 2014-2020.

Data collection

Horizon 2020 funded projects were searched through the CORDIS website platform (<https://cordis.europa.eu/search/en>).¹ In order to identify projects involving nonhuman animals, we searched for “animal” as the keyword. The search was conducted on October 13, 2021. As Table 1 shows, 7.55% (n=2,662) of all the results for Horizon 2020 funded projects (N=35,274) included “animal” in the data provided by CORDIS.

Table 1

Total Horizon 2020 projects (N) and projects including “animal” (n)

Number of Horizon projects found in CORDIS	35,274 (N)
Number of projects in N including the word “animal”	2,662 (n)

Coding procedure and categories

A coding sheet was built and refined through a series of four pilot tests conducted by two coders, until achieving a satisfactory intercoder reliability (more than 90% of agreement). The two coders then proceeded with the coding of the 2,662 projects that included “animal” on their CORDIS webpage.

Table 2 shows the information collected for each n project. Table 3 shows the categories used to identify whether nonhuman animals benefitted from the projects (by identifying the interests considered in the project) and the topic of the research. With regards to benefits, projects were categorized as being focused only on human interests, only on animal interests, or as having a potential benefit for nonhuman animals, despite their not being explicitly mentioned as the target group. Regarding topic

¹ CORDIS is the European Commission’s Community Research and Development Information Service. The CORDIS website is the primary source of data for projects funded under the EU framework for research and innovation programmes (FP1 to Horizon 2020 at the time of writing this report).

categories, projects were coded as fitting into one or two categories. The information was manually collected from each project webpage in CORDIS. Where it was unclear, the official project webpages were also consulted.

Open access source data

The coding sheet of our analysis with the data collected for the 2,662 (n) projects mentioning “animal” is available on the UPF-CAE website.

Limitations of the research

The CORDIS website’s search engine offers a slightly different result each time it is consulted; our data only reflect the database output as of October 13, 2021. Also, because some of the data had to be collected manually, this may have produced some involuntary omissions. The latter is in addition to the coders’ lack of specialization regarding very technical topics (e.g., natural sciences), which may have also resulted in some data not being collected (e.g., missing some potential benefit for other animals). These limitations do not compromise the results of the research.

Table 2

Basic information collected from CORDIS for each project including “animal” (n)

Acronym: The short name of the project.

Title: The main name of the project.

Abstract: The short description of the project and its aim.

Programme: The editions of H2020 that have benefitted the project (may be more than one).

EuroSciVoc: The fields of science related to the project.

Country: The principal investigator’s country of origin.

Principal investigator: The institution to which the principal investigator belongs that applied for the funding and executed the project.

EU contribution: The amount of money made accessible by the EU to execute the project.

Other contribution:

Yes: if the project received other contributions, besides from the EU.

No: if the project did not receive other contributions.

Not available: if the amount of the other contributions to the project is not available.

Start date: Day, month and year the project began.

End date: Day, month and year the project ended.

Links: The webpage of each project on the CORDIS platform.

Table 3
Categories coded for each project including “animal” (n)

Interest: Defines the group of individuals benefitting from the project. The following codes were used:

1 - Humans: nonhuman animals are only mentioned as a means to human ends. The research involves nonhuman animals as experimental subjects and/or is devoted to optimizing the exploitation of nonhuman animals in human activities, particularly in the economic sphere.

2 - Potentially animals: nonhuman animals are not mentioned as the target group, but could benefit from the knowledge or technologies generated by the project. If some animals are potentially hurt or killed for the good of other animals, the project was not placed in this category.

3 - Animals: the wellbeing of nonhuman animals is mentioned as the aim of the project. Humans may benefit from the research as well, but indirectly.

Topics: Specifies the field in which the interest is situated. The topic of the project was inferred from different variables, including the abstract, title, keywords and the area of research chosen by the projects in their application. If the project is related to more than one area, the other were stated in a second column. Eight categories were identified:

1 - Agribusiness: the project focuses on or is related to the economic sector that commodifies the bodies of nonhuman animals, mainly pigs, chickens, cows and fishes, and all other forms of agriculture and aquaculture. It usually addresses profitability, sustainability, health and/or welfare.

2 - Culture: the project focuses on the field of humanities, which may include the human–nonhuman animal relationship in terms of religion, history, education, politics and society.

3 - Health sciences: the project focuses on or is related to the fields of medicine, nutrition and wellbeing of human and nonhuman animals.

4 - Natural sciences: the project focuses on the field of life sciences, which may include cell biology, developmental biology, physics, behavioural ecology, neuroscience, psychology and environmental protection.

5 - Research industry: the project aims to contribute to improving research processes in different fields, which may, for example, include life or health sciences, but also related to technological inventions.

6 - Technology: the project focuses on the fields of Big Data, Robotics, Artificial intelligence, and all kinds of technological inventions.

7 - Fashion Industry: the project focuses on the field of fashion and alternative materials for making clothes, which may include vegan leather.

8 - Pet Industry: the project focuses on the companion animals market, including everything associated with their production and consumption, and cultural activities linked to the market.

3 / Results

3.1. Projects mentioning nonhuman animals

According to the CORDIS search engine, the Horizon 2020 programme (2014-2020) contains a very low percentage of funded projects including the word “animal”, and thus showing some involvement of nonhuman animals in the goals of the project. Only 7.55% (2,662) of all funded projects (35,274) included a mention of the word “animal”, while 92.45% (32,612) included none (Fig. 1).

3.2. Interests of projects mentioning nonhuman animals

Of all the projects that mentioned “animal”, 85.46% (2,275 funded projects) were found to be driven by human interests alone; 12.51% (333) were found to potentially benefit animal interests; and 2.03% (54), explicitly contemplated animal interests as defined in the methodology section of this report (Fig. 2). Therefore, in the context of all projects funded by Horizon 2020, the number explicitly contemplating animal interests is negligible: 54 out of 35,274, that is 0.15% of all projects. Even adding those projects that potentially benefit animal interests, the percentage of projects contemplating animal interests still only amounts to 1.09% of the total (Fig. 3).

3.3. Funding received by projects mentioning nonhuman animals

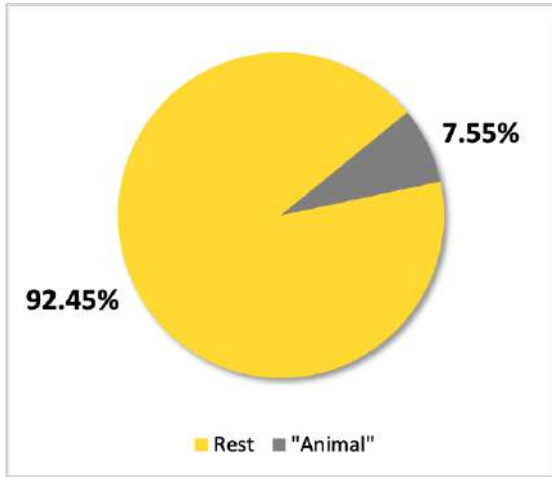
Projects mentioning “animal” received a total of €6,207,561,073.05, of which 90.25% (€5,602,329,036.64) was allocated to projects driven by human interests; 8.01% (€496,976,815.27) was allocated to projects that could potentially benefit animal interests; and 1.74% (€108,255,221.14) was allocated to projects focused on animal interests (Fig. 4). Therefore, the funding allocated to projects not driven by human interests, or not only, accounted for 0.79% of the total Horizon 2020 budget (Fig. 5).

3.4. Topics of projects according to interests

More than half (55.56%) of all projects considering animal interests focused on the research industry as their topic, followed by natural sciences (24.07%) and health sciences (14.81%). Projects with potential benefit for nonhuman animals were mostly in the fields of health sciences (61.56%), natural sciences (29.43%) and the research industry (20.12%). Projects mentioning “animal” but focusing on human interests conducted research on the topics of health sciences (36.92%), natural sciences (34.73), agribusiness (28.75) and technology (25.10) (Figures 6, 7 and 8).

FIGURE 1

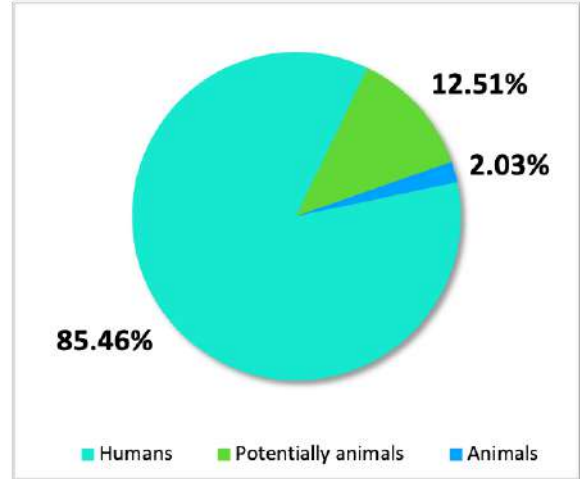
Funded projects mentioning "animal" in Horizon 2020



Source: CORDIS, October 13, 2021.

FIGURE 2

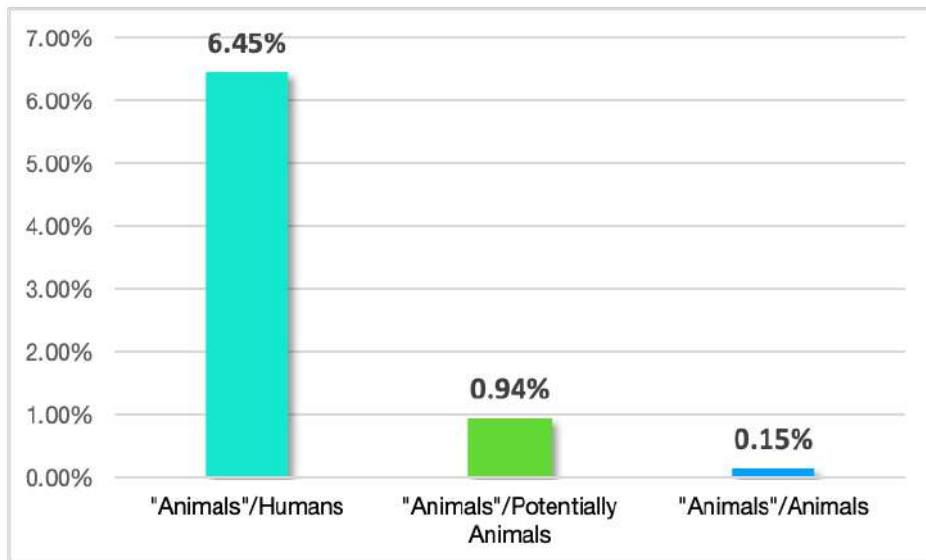
Distribution of projects mentioning "animal" according to interest



Source: CORDIS, October 13, 2021.

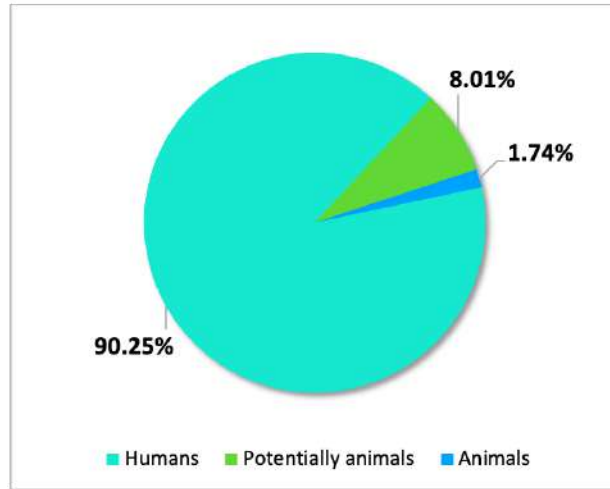
FIGURE 3

Percentage of funded projects mentioning "animal" according to interest (of all Horizon 2020 projects)



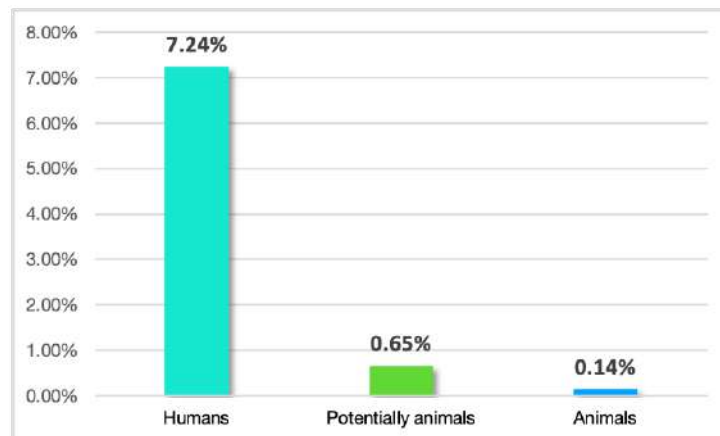
Source: CORDIS, October 13, 2021.

FIGURE 4
Distribution of funding amongst projects mentioning “animal” according to interest



Source: CORDIS, October 13, 2021.

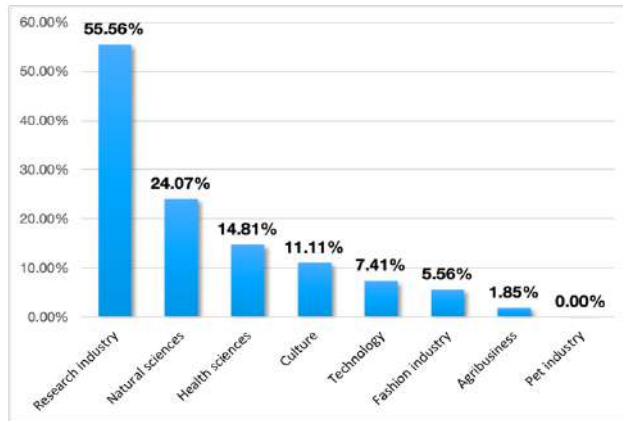
FIGURE 5
Percentage of budget allocated to funded projects mentioning “animal” according to interest (of all Horizon 2020 projects)



Source: CORDIS, October 13, 2021.

FIGURE 6

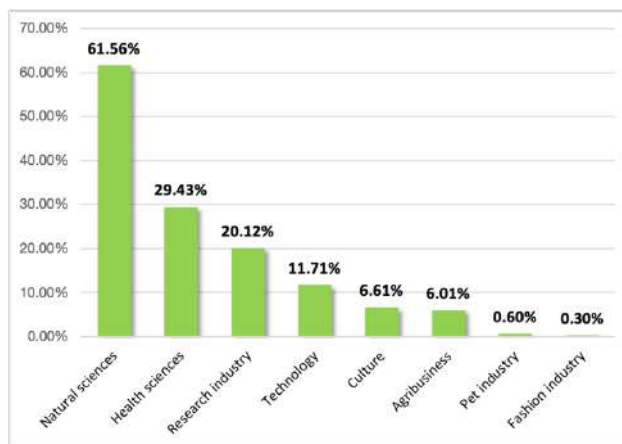
Topics of projects considering animal interests



Source: CORDIS, October 13, 2021.

FIGURE 7

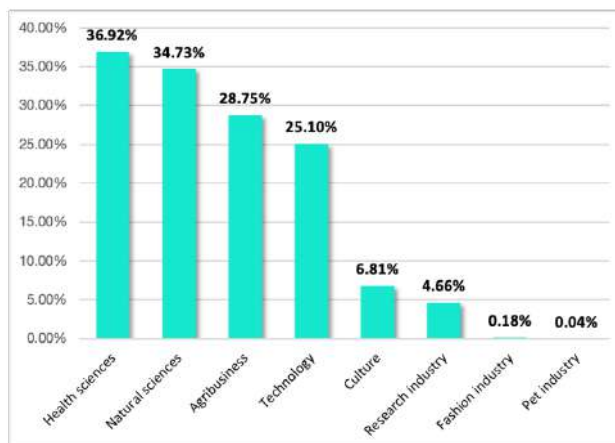
Topics of projects potentially benefitting animals



Source: CORDIS, October 13, 2021.

FIGURE 8

Topics of projects mentioning “animal” but focusing on human interests



Source: CORDIS, October 13, 2021.

4 / Conclusions

Our research shows that EU public funding is disconnected from societal concern and scientific knowledge regarding animal sentience. The budget for the Horizon 2020 programme (2014-2020) allocated to projects not having an anthropocentric gaze, or at least being open to including the interests of other animals in an explicit way, is negligible. **Projects contemplating nonhuman animal interests represent 0.15% of all funded projects and received only 0.14% of all funding for the period.** If we add to these those projects that may indirectly benefit nonhuman animals, even if having human interests as a priority, the figures increase to represent just 1.09% of all projects and 0.79% of all funding. The vast majority of funded research involving nonhuman animals for the studied period focuses only on human interests (90.25% of all funding), which in many cases implies experimenting with nonhuman animals and/or working to optimize their exploitation, mostly in the agriculture sphere. That is, the majority of funded research involving nonhuman animals in the EU harms other animals or attempts to optimize practices that harm them.

This report did not have access to data on how many projects that consider animal interests were rejected by the EU's Horizon 2020 Programme. However, it seems reasonable to think that the number of projects that applied to the programme for funding with the explicit aim of benefitting nonhuman animals would have been very small, based on both research and funding trends. That is, the number of researchers concerned with nonhuman animal interests is overall much lower than the number of researchers with interests mostly, or only, in humans. At the same time, the tiny number of past projects that have been successful in obtaining funding by focusing on animal interests may have discouraged other researchers with the same perspective: the EU research and innovation programmes are extremely competitive, and decentering the focus from humans may only make things more difficult for applicants.

However, the trend in research is changing, as an increasing number of researchers are considering animal interests and applying non-anthropocentric perspectives in their work, in alignment with the widespread concern for animal protection and defence mentioned in the introduction. Academic research institutes (both those linked to universities and independent ones), animal defence think tanks and governmental and nongovernmental organizations that conduct research for the sake of nonhuman animals are blossoming everywhere, including in the European Union. It is vital that the EU funding trend therefore adapts to this reality once and for all.

The 2014-2020 EU public research funding **in no way reflects** European citizens' concerns for animal suffering. To align with current scientific knowledge and the ethical concerns of society, the European Commission needs to increase funding on animal welfare, interests and protection in their research and innovation programmes. To this end, we suggest the following measures:

- **Train and hire programme reviewers with awareness, proficiency and knowledge in animal ethics.** That is, involve reviewers sensitive to the need to fund non-anthropocentric, non-speciesist research focused on animal interests: helping nonhuman animals in need, whatever the situation; reducing (or, ideally, abolishing) animal exploitation; and educating citizens to develop respect and moral consideration towards individuals of other species for moral reasons.
- **Stop funding research that in any way harms nonhuman animals, whatever its benefit**—or alternatively, progressively reduce this funding until it is phased out. This may be supported by educational and training programmes for researchers still working in areas that harm nonhuman animals and by incorporating syllabus courses on animal ethics, interspecies ethics, critical animal studies and human-animal relations at all levels of education.
- **Increase funding for humanities and social sciences research that adopts a non-speciesist perspective.** The paradigm shift needed in society to stop harming nonhuman animals involves multidisciplinary and interdisciplinary reflection, which cannot be made without taking into consideration the ethical, behavioural, educational, cultural and communicational contributions of these disciplines.
- **Regularly launch specific research funding calls aimed at protecting nonhuman animals**—including calls related to animal ethics, critical animal studies, human-animal studies and general animal welfare for non-anthropocentric purposes. A relevant proportion of the EU's research and innovation budget should ideally be allocated to these calls, with the understanding that considering other animals' interests is not just a moral duty, but also the fastest way to effectively manage the most urgent environmental and societal threats currently facing humanity.

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