Analysis of the ARD Faktenfinder article "Indian activist Shiva: eco-icon with questionable views" and counterstatement

On 13.12.2022 the ARD (German public broadcaster) published the article "Indian activist Shiva: eco-icon with questionable views" on its online portal "Faktenfinder". We would like to comment on this as follows. The individual sections of the article – herein after called "Fact Finder article" - are dealt with in chronological order. The relevant excerpts from the Fact Finder article are marked in bold.

First section "Genetic changes occur permanently"

The first section, as almost the entire Fact Finder article, is about genetic engineering in agriculture. Right at the beginning it gives the impression that genetic engineering - which Vandana Shiva has been fighting against for years with her organisation Navdanya, including with <u>success</u> - is completely natural. Jochen Kumlehn, head of the Plant Reproductive Biology working group at the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), is quoted:

"'Genetic material is permanently subject to change. All organisms only came into being and are so diverse because dozens of genetic changes occur in each individual.' The assumption that genetic changes are something unnatural is therefore fundamentally wrong."

At no point has Vandana Shiva claimed that genetic changes are something unnatural. Moreover, the reader is incorrectly informed. So-called green genetic engineering is not about genetic changes (technical term: genetic variation), but about genetically engineered changes. There is a significant difference. Genetic engineering is a targeted interference directly into the genetic make-up by means of technology and remains highly controversial. Since the ban on maize MON810 (2009) and on the potato Amflora (2013), the cultivation of genetically modified plants in Germany has de facto no longer been allowed. The wording of the Fact Finder article is misleading.

Furthermore, Kumlehn, who as a researcher carries out genome editing, accuses conservationists and opponents of genetic engineering of "romanticising the concept of nature", which according to him is "a fundamental problem in the discourse on genetic engineering", and continues:

"Natural genetic changes occur randomly and properties can arise in the process that are advantageous, while many more changes, however, lead to disadvantages. So nature is by no means good in principle, but at best neutral."

The statement that nature is "by no means good in principle, but at best neutral" must be viewed critically and cannot be cited as a scientific fact but only as the view of one branch of science. As the <u>Wikipedia entry "Nature"</u> under "Nature in science" states:

"Within science, nature is conceived very differently, mostly it is assumed that natural science deals with nature or at least a part of it. (...) However, the handling of the term must be presented as very controversial in the philosophy of science."

While Jochen Kumlehn's work can be attributed to engineering sciences (technology, also biotechnology), the work of Vandana Shiva is the natural science of ecology (sub-discipline of biology). Both are part of today's science and are also recognised as such in the mentioned section of the Wikipedia entry.

It should be added that Kumlehn's view that nature is "neutral at best" has been used by parts of science but also by politics and industry to justify the unrestrained exploitation of nature. In principle, this is precisely what Vandana Shiva means when she speaks of a reductionist worldview that reduces nature to an object to be commercialised. In the aforementioned Wikipedia entry it says about this under "Nature as a commodity":

"Such a view of human use has been criticised from many sides. For example, in his 1973 book 'Small is beautiful', the economist Ernst Friedrich Schumacher explains that nature and the creatures living in it - also in their own right - are to be regarded as 'goals' and should not simply be viewed from an exclusively economic point of view. Even in a purely rational view, Schumacher therefore sees it as justified to state 'that they are in a certain sense sacred'."

Two scientific views collide here, both of which should have been included in an objective consideration of a serious fact check. This lack of balance runs throughout the whole Fact Finder article.

Second section "Faster breeding possible with genetic engineering"

The next section quotes Christoph Gornott, Head of the Department of Agroecosystem Analysis and Modelling at the University of Kassel and Head of the Adaptation in Agricultural Systems Working Group at the Potsdam Institute for Climate Impact Research (PIK):

"Over the last 10,000 years of our human history, we have selected the biggest, best or tastiest seeds when breeding".

Gornott thus indirectly agrees with Vandana Shiva when she refers to traditional seed diversity which has been displaced by monocultures for several decades and the importance of protecting it. The "we" used by Kumlehn is misleading as it were indeed the many generations of small farmers who have delivered this diversity over the centuries using traditional methods without any laboratory techniques. They are now under pressure and are supported by Vandana Shiva and many other social, environmental and consumer organisations worldwide in their struggle for independence from agricultural industry and for freedom of choice when it comes to genetic engineering.

Again, genetic changes and genetic engineering are being mixed up. In 1973, biochemists used genetic engineering for the first time to transfer genetic material from one organism to another. In the Planet Wissen article "Genetic Engineering" this is described as the "birth of a new science". The long-term risks and effects of this new science, especially green genetic engineering, on the entire ecosystem have not been adequately researched and it thus remains highly controversial. However, this does not become evident from the Fact Finder article.

For the sake of completeness, it should be mentioned that Gornott, through PIK Potsdam, and Kumlehn are both part of the Leibniz Association, which receives <u>funding</u> by the Bill and Melinda Gates Foundation.

"This can reduce the use of plant protection products." (reference: genetic engineering)

When talking about plant protection products - pesticides - in relation to genetic engineering, a distinction must first be made between fungicides, insecticides and herbicides. The use of the latter - so-called broad spectrum herbicides based on glyphosate - logically cannot possibly decrease because the business model of manufacturers like Monsanto is based on making crops resistant to herbicides through genetic engineering so that the herbicides can then be applied more widely to kill other unwanted plants.

This differentiation is not clearly presented in the Fact Finder article, although even the linked meta-analysis from 2014 addresses this itself by admitting (see "Results"): "pesticide reductions are larger for insect-resistant crops than for herbicide-tolerant crops". While many previous studies were used in the meta-analysis, not all of them were included, especially those that reached different conclusions:

According to a 2012 <u>study</u>, the increase in herbicides in the U.S. has dwarfed the decrease in insecticides by at least 4 times over the past 16 years: herbicide use increased by 239 million kg, while insecticide use decreased by 56 million kg. Thus, pesticide use increased overall by an estimated 183 million kilograms or about 7%. Quoted from "Conclusions":

"Contrary to often-repeated claims that today's genetically-engineered crops have, and are reducing pesticide use, the spread of glyphosate-resistant weeds in herbicide-resistant weed management systems has brought about substantial increases in the number and volume of herbicides applied."

Another <u>study</u> from 2012, also not included in the meta-analysis cited by the Fact Finder article, comes to a similar conclusion, highlighting the ecological risks of such broad spectrum herbicides and predicting an increase in weed resistance and a further significant increase in herbicide use as a result.

Ten years later this is exactly what has happened: "Over 80 per cent of GM crops in cultivation around the world are genetically engineered for herbicide resistance, leading to a manifold increase in the use of glyphosate-based herbicides", as an article in the Pakistani daily Dawn recently noted. Also resistance in weeds has steadily increased worldwide since then.

Of the overall 27 studies included in the meta-analysis cited by the Fact Finder article, five are by the author of the meta-analysis himself, Matim Qaim, whose <u>curriculum</u> shows numerous ties to the agricultural industry. Can such industry-related analyses really be presented as "facts" while other <u>analyses</u> with different findings, independent <u>studies</u> and <u>counter-arguments</u> are not being taken into account?

Third section "No evidence of more suicides among Indian farmers"

Already in the television report "Titel, Thesen, Temperamente" (ARD, 26.11.2022) it was claimed that Vandana Shiva had made herself a target for criticism by attributing the suicides of Indian cotton farmers to the introduction of Bt cotton, and accused her of "bending the truth". In this section of the Fact Finder article, the accusation is repeated and now the source for this claim is also revealed (see link):

"Shiva blamed Bt cotton and its seed producer Monsanto for the suicide of hundreds of thousands of farmers because they were financially ruined by Bt cotton. Yet there is no empirical evidence to support this accusation - moreover, the <u>suicide rate among small farmers after the introduction of Bt cotton</u> has remained constant."

The linked source is a discussion paper from 2008 prepared by the <u>IFPRI International Food Policy Research Institute</u> in Washington and funded by CGIAR (Consultative Group on International Agricultural Research) and others. CGIAR in turn has been massively funded by the Bill and Melinda Gates Foundation with over <u>USD 1 billion</u> (as of Nov. 2021) and recently with a further <u>USD 1.4 billion</u> (as of Nov. 2022).

It is fair to assume that the authors are not independent and that the results of their paper are thus biased. Moreover, since then there have been three other studies confirming the link between the introduction of Bt cotton and suicides among India's farmers:

- 1) "Deconstructing Indian cotton: weather, yields, and suicides" Environmental Sciences Europe, 2015
 This study by researchers at the University of California finds that annual suicide rates among farmers in rain-fed areas are directly related to the increasing adoption of Bt cotton (see "Conclusions"). A summary of this study can be read in an article in The Hindu, India's third largest English-language daily newspaper.
- 2) "<u>Farmer-suicide in India: debating the role of biotechnology</u>" Life Sciences, Society and Policy, 2017
 This study analyses arguments of proponents and opponents. Vandana Shiva is also quoted. The study confirms Shiva's assumption and states that there is a <u>definite association between Bt cotton and farmers suicides</u> (see "Conclusions").
- 3) "Bio-economics of Indian hybrid Bt cotton and farmer suicides" Environmental Sciences Europe, 2020 This study addresses the economic-social background of the suicides and also the ecological problems of Bt cotton. It concludes that the use of Bt cotton is a proximate cause of cotton farmer suicides (see "Conclusions"). A researcher involved in this study is Keshav R. Kranthi, the former head of the Central Institute for Cotton Research in India and currently Chief Scientist of the International Cotton Advisory Committee in Washington, USA.

It is also worth taking a look at an <u>article</u> on this topic written by Dr. Shiva in 2013 which quotes the source that is certainly the most competent to assess the situation: the Indian Ministry of Agriculture. Citing the corresponding excerpt:

"An internal advisory by the agricultural ministry of India in January 2012 had this to say to the cotton-growing states in India -'Cotton farmers are in a deep crisis since shifting to Bt cotton. The spate of farmer suicides in 2011-12 has been particularly severe among Bt cotton farmers'."

The Indian Government's statement on this is also confirmed in articles by major Indian newspapers such as the <u>Hindustan Times</u> and the <u>Deccan Herald</u>. Andrew Paul Gutierrez, Professor Emeritus at the University of California and one of the researchers involved in the above-mentioned studies of 2015 and 2020, quotes Rajendra Kumar Trivedi, Deputy Commissioner (Seeds), Ministry of Agriculture and Farmers Welfare of the Indian government in his article "Hybrid Bt cotton: a stranglehold on subsistence farmers in India" from 2018 as follows:

"In the event of failure to raise a profitable yield, the farmers end up piling up huge debts which in turn has caused a rise in farmers' suicides across various cotton growing states."

The claim in the ARD Fact Finder article that there is "no evidence for more suicides among Indian farmers", and the accusation of "bending the truth" in the ARD report "Titel, Thesen, Temperamente" are thus incorrect and not tenable. These three studies cited here and the statements of the Indian Government prove this.

The second paragraph of this section is about genetically engineered "Golden Rice" which, again, is controversial (see Wikipedia entry "Golden Rice" under "Controversies"). In addition to Dr. Shiva and Greenpeace, for example also the Union of Latin American Scientists Committed to Society and Nature (UCCSN-AL) criticises its introduction (source). Nevertheless, the Fact Finder article gives the impression that Shiva and other activists have prevented the introduction of Golden Rice, thereby denying children in emerging and developing countries access to vitamin A. Among other things, the Fact Finder article states:

"Field trials have been repeatedly prevented by activists which helped to ensure that this rice could only be grown agriculturally for the first time in 2022 - a good twenty years later than planned."

The Wikipedia entry on Golden Rice does report on the field trials (see here), but not that activists prevented them. Instead it states rather that high regulatory hurdles and political discourse, but also developmental and patent law problems are the reason for the delay.

Glenn Davis Stone, Professor of Sociocultural Anthropology and Environmental Studies at Washington University who has studied the topic in depth is quoted in the 2016 article "Genetically modified Golden Rice falls short on lifesaving promises" as follows:

"Golden Rice is still not ready for the market, but we find little support for the common claim that environmental activists are responsible for stalling its introduction. GMO opponents have not been the problem. (...) The simple fact is that after 24 years of research and breeding, Golden Rice is still years away from being ready for release."

This is confirmed in the article "Millions Spent, No One Served: Who Is to Blame for the Failure of GMO Golden Rice?" by Angelika Hilbeck and Hans Herren (winner of the World Food Prize and the Right Livelihood Award) which also explains this historical background. The first generation of Golden Rice GR1 completely failed and the second generation GR2 is still not fully developed.

Furthermore, according to the US Food and Drug Administration (FDA), GR2 offers no nutritional benefits.

As of 2019, Golden Rice is still not ready for use because according to its developers it is still in the testing and evaluation phase (source: dossier "Golden" rice - Vitamin A through genetic engineering?").

Golden Rice in its second generation is funded through the International Rice Research Institute by CGIAR and the Bill and Melinda Gates Foundation which also funds a broad-based <u>pro-GMO campaign</u> through the Cornell Alliance for Science (now Alliance for Science).

Fourth Section "Bill Gates as an Enemy Image"

"Shiva also made a connection between autism, the use of GMOs and the pesticide glyphosate - yet there is no scientific evidence for this either."

This connection was not made by Dr. Vandana Shiva herself, but by US scientist Stefanie Seneff, Senior Research Scientist at the Massachusetts Institute of Technology. A graph created from her work shows indeed a strong correlation of the increase in autism among children and the use of glyphosate. In the 2015 book "Seed Sovereignty, Food Security: Women in the Vanguard", a collection of contributions by women food producers, activists and scientists from around the world, edited by Vandana Shiva, Seneff writes in "Autism and Glyphosate: Connecting the Dots":

"While correlation does not necessarily mean causation, the correlation between Roundaup usage on corn and soy in the previous four years and the rate of autism in first grade in the US public school system is 0.997, looking at the trends from 1995 to 2010. This is almost a perfect match, as shown in <u>Figure 1</u>. At the very least, awareness of such strong correlation ought to inspire research to see if there are good reasons, biologically, why Roundup might cause autism."

Furthermore, not only Seneff but also other scientists have found a link between increasing pesticide use and diseases such as autism, including Shelton et al. (2014), Swanson et al. (2014), Argou-Cardozo et al. (2018) and Xiu He et al. (2021). Quoting from Shelton's study ("Conclusions"): "This study of ASD (Autism Spectrum Disorders) strengthens the evidence linking neurodevelopmental disorders with gestational pesticide exposures."

Further studies and expert testimony regarding the link between glyphosate and diseases such as autism can for example be found in articles published in the <u>Autism Parenting magazine</u> and by the <u>Mindd Foundation</u>. In June 2022, in a historic ruling, a U.S. court <u>overturned</u> the Environmental Protection Agency's (EPA) decision that glyphosate was safe for humans and endangered wildlife. The EPA subsequently <u>withdrew</u> its decision in September 2022.

"One of her biggest enemy images is the US billionaire Bill Gates, as is the case with many conspiracy ideologists. According to Shiva, he is part of a kind of conspiracy of the richest one percent of people who want to 'destroy the economy with false food'."

"False food" is the unfortunate translation of the English "fake food" that Vandana Shiva indeed talks about and which is also the subject of Navdanya International's dossier "The Corporate Push for Synthetic Foods: False solutions that endanger our health and damage the planet", for which Dr. Shiva wrote the foreword.

There is a misquotation here. It is not the economy that would be destroyed by so-called "fake food" - on the contrary, the industry hopes to make enormous profits from it - but rather it is *agriculture* and especially small-scale farming that would be destroyed. The production of "plant-based" synthetic food from a laboratory means even more monocultures with more genetic engineering and higher pesticide use - and with corresponding consequences for the environment and human health.

The article in Deutsche Wirtschaftsnachrichten "Eco-organisation against lab meat: 'Great Reset contains a plan to transform human nutrition'" reports on Navdanya International's dossier and shows the players behind initiatives such as EAT or FreSH, among them the World Economic Forum and the Bill and Melinda Gates Foundation, but also companies like Bayer, Syngenta, Unilever and Google. Citing two excerpts from the article (translated):

"According to Frederic Leroy, professor of food science and biotechnology at the University of Brussels, the EAT network works closely with some of the biggest imitation meat companies including Impossible Foods and other biotech companies that want to replace healthy nutritious food with genetically modified lab creations. 'They're framing it as healthy and sustainable, which of course it's not', Leroy told The Defender. Impossible Foods was originally co-funded by Google, Jeff Bezos and Bill Gates. Recent lab results showed that the company's fake meat contained 11 times higher levels of glyphosate than its closest competitor. EAT's biggest initiative is called FReSH and is described by the organisation as an attempt to drive the transformation of the food system."

"Leroy says: 'Companies like Unilever and Bayer, as well as other pharmaceutical companies, are already chemical processors. Many of these companies are therefore very well positioned to benefit from this new food business, which is about processing chemicals and extracts needed to produce these lab-made foods globally'."

Against this background, it should also become clear what Vandana Shiva means when she is quoted in the Fact Finder article, but without giving the context:

"In an interview in June 2021 she told Russian state broadcaster RT Deutsch directed towards German readers with regard to Monsanto, which now belongs to the Bayer Group: 'Watch out! Back then you had Hitler and now you have Bayer! Don't let Bayer become your invisible government'."

Although the interview by RT Deutsch is still available to <u>read here</u>, it was not linked in the Fact Finder article. The issue of "Bayer in the National Socialism era" is dark and would have deserved more attention - especially in a German-language medium. It is discussed however in Shiva's book "Who Really Feeds the World?: The Failures of Agribusiness and the Promise of Agroecology", here is an excerpt:

"On December 25, 1925, I. G. Farben, a German chemical conglomerate, was constituted in a merger of existing chemical companies that included BASF, Bayer, and Hoechst. In the 1920s and 1930s, I. G. Farben screened Zyklon B for Hitler's extermination effort and used nerve gases on victims of the Holocaust in concentration camps. Others involved in the trials with nerve gases were DuPont, Shell, Union Carbide, Basel AG (Ciba, Geigy, and Sandoz), American Cyanamid, and Rhône-Poulenc—all companies that are today well known for the chemicals, pesticides, or oil they deal in. This is because following the war, companies specializing in the genocide of human beings turned their attention elsewhere." (page 44).

All this and more can also be read in the Wikipedia entry on "I.G. Farben". Quoted from it (translated):

"IG Farben grew during the National Socialist era, among other things through expropriations, to become the largest European company and the largest chemical and pharmaceutical company in the world."

Dr. Shiva has long been concerned with the protection of nature against industrial exploitation, especially in agriculture. In doing so, it is inevitable to consider also Bill Gates role whose influence has greatly increased in recent years through investments especially in the areas of the green revolution and green genetic engineering. This was also reported by Reporterre in France and other European newspapers, including Der Spiegel, La Libre Belgique, El Diario in Spain, Domani in Italy, Público in Portugal, Reporters United in Greece and the EU Observer. The reporting was based on documents obtained by Corporate Europe Observer under Freedom of Information which became known as the CRISPR files. In them, one name keeps cropping up: Bill Gates.

Vandana Shiva has never claimed that he is "part of some kind of conspiracy". On the other hand, in her book "Oneness Vs. the 1%: Shattering Illusions, Seeding Freedom", she analyses and explains in detail the profound influence Gates and others now have on international bodies, intergovernmental organisations and political decision-making processes.

"Enemy images" and "conspiracy ideologies" belong to the emotional-irrational realm, while Vandana Shiva's work is dedicated to scientific analysis and to supporting millions of small farmers against the appropriation of food systems by agribusiness, including green genetic engineering.

In recent decades, a broad movement against genetic engineering and agribusiness as well as for <u>food sovereignty</u> and <u>agroecology</u> has formed worldwide. Vandana Shiva is part of this movement, as are many others. The following points should have been included in a balanced fact check on these issues:

- The Bill Gates-driven African Green Revolution (AGRA) has demonstrably <u>failed</u>. Instead of fighting hunger, it has increased the number of hungry people in Africa.
- The <u>UN Food Summit</u> is now dominated by industrial and financial interests. The voices of small farmers, especially from the Global South, are not being heard.
- The People's Coalition on Food Sovereignty, an alliance of over 150 smallholder associations mainly from the Global South, called on the United Nations in 2021 to stop the "hijacking" of the Food Summit by the World Economic Forum in Davos, whose partners include the Bill and Melinda Gates Foundation, and to terminate its partnership with it.
- As a consequence, the last UN food summit in 2021 was <u>boycotted</u> by the world's largest alliance for food sovereignty CSM (Civil Society and Indigenous Peoples' Mechanism for relations with the United Nations Committee on World Food Security) with over 300 million members from 500 civil society groups.
- In Germany, tens of thousands of people demonstrate every year in Berlin in a broad civil society alliance under the slogan "We're fed up!" against genetic engineering and the agricultural industry (participant numbers in recent years: 2017: 18,000; 2018: 30,000; 2019: 30,000; 2020: 27,000).
- Also in Africa there is a broad civil society alliance for food sovereignty and agroecology: the <u>Alliance for Food Sovereignty in Africa</u> (AFSA) represents African smallholder farmers, fishermen, herders, pastoralists, consumers and environmentalists. Together with AGRAWatch, they have just released the short film series "<u>Rich Appetites</u>" where it reads: "The Bill & Melinda Gates Foundation (BMGF), the largest private charitable foundation in the world, is leading the way in pushing global agricultural development priorities toward industrial and chemical-intensive models".
- Other actors in the global movement against genetic engineering and agribusiness include: La Via Campesina, Nyéléni, Organic Consumer Association, International Federation of Organic Agriculture Movement (IFOAM) Regeneration International, Navdanya International, Community Alliance for Global Justice, People's Coalition on Food Sovereignty, International Planning Committee for Food Sovereignty, the Slow Food Movement, the organic and natural food movement, environmental organisations such as BUND and NABU and many more.

According to the approach of the Fact Finder article, all these organisations and the millions of people they represent worldwide would have to be "conspiracy ideologues", just like the 420,000 signatories of the <u>petition for freedom of choice and risk assessment in genetic engineering</u> that has recently been handed over to the German Federal Ministry of Agriculture.

The Fact Finder article goes on to quote Vandana Shiva as follows:

"Gates is also in control of the WHO."

The increase of his influence on the World Health Organisation is worrying for many. The WELT, together with the US daily Politico, therefore published the research "The Power Machine of Bill Gates" on this topic in September last year (English version: "How Bill Gates and partners used their clout to control the global covid response - with little oversight").

Also the Neue Züricher Zeitung (NZZ) article "Is Bill Gates the saviour of mankind or a vaccination villain? Why his foundation earns so much criticism even though it pretends to do good" addresses the criticism of the Bill and Melinda Gates Foundation as a "superpower in global health care". In it's section "The «Bill Chill», the Fear of Academics" it says in reference to the academic world (translated):

"This effect of the top dog dominating everything with its superior power is also evident in academia. There is hardly a department or institute of global health that has not received or wants to receive funds from the Gates Foundation. No one wants to jeopardise this source. With the result that there is little critical research on the foundation and the effectiveness of the Gates Foundation's work."

Even the ARD admits in another Fact Finder article entitled "Who finances the WHO?": "The WHO's financing model is repeatedly met with criticism: the organisation is too dependent on the will of the respective governments, private foundations or even pharmaceutical companies. 'If Bill Gates were to say tomorrow: I'm no longer interested in health, I'm investing all my money in education issues, for example, the WHO would be finished', the Indian doctor and health activist Amit Sengupta, for instance, had declared on <u>Deutschlandfunk</u> in 2017."

Section "Worldviews instead of facts"

This section features social psychologist Pia Lamberty, Managing Director of the Center for Monitoring, Analysis and Strategy (CeMAS), who has <u>worked</u> with ARD Fact Finder before. Lamberty's company deals with "monitoring & research" and "analysis & theory" on the topics of conspiracy ideologies, disinformation, anti-semitism and right-wing extremism. Another business area is strategic consulting for politics, authorities, media and social media platforms. CeMAS is funded by the Alfred Landecker Foundation with <u>2.8 million euros</u>, yet it asks for donations on its website. It is also represented in the <u>lobby register</u> of the Bundestag (Lower House of the German Parliament).

What Lamberty says in the Fact Finder article about Vandana Shiva and the alleged "creation of enemy images" has been sufficiently refuted with the arguments stated above. Ms Lamberty is not concerned with genetic engineering, agriculture or the Third World hunger problem, but with "fake news" on social media platforms. We do not think Lamberty is qualified to make the statements about Vandana Shiva she is quoted with in the Fact Finder article.

Section "Green genetic engineering a cog with a lot of potential"

In the last section, Vandana Shiva is no longer mentioned, but Jochen Kumlehn's statement that there is a "consensus in science that green genetic engineering does not pose a higher risk than conventional breeding" should still be addressed. This is manifestly untrue. Otherwise, genetically modified organisms would not be subject to the strictest regulations in the EU. Precisely because the risks have not yet been thoroughly researched and cannot be ruled out, the precautionary principle still applies. In order to ensure that this remains the case, the German Federal Consumer Association as well as the SPD parliamentary group in the Bundestag have just recently called for its continuation.

Finally, the second to last paragraph of the Fact Finder article reads:

"However, according to agricultural scientist Gornott, green genetic engineering can also promote negative developments. This has to do above all with the agricultural system. In conventional agriculture, the main goal is to achieve the highest possible output, even if a lot of resources have to be used for this, he says. In addition, biodiversity often suffers in agricultural systems in which green genetic engineering is used."

The loss of biodiversity is indeed one of the biggest problems we face as humanity. For example, almost 50% of the global insect extinction is due to the agricultural industry, as is clearly shown in a graphic in the Deutsche Welle article "Biodiversity - Nature as the Key to Survival". This is exactly what Vandana Shiva says, who has been campaigning for the preservation of biodiversity on our planet for over 40 years.

Summary

This Fact Finder article largely focuses on unsubstantiated, refutable criticism of Dr. Vandana Shiva without seriously engaging with her work. Only industry-related and/or unqualified sources were used without presenting independent views, other perpectives or counter-arguments. Statements by Dr. Shiva were taken out of context or distorted, facts were misrepresented.

The article is far removed from a balanced analysis of the facts, furthermore it is written in a tendentious style (see introduction: "For decades, Indian activist Vandana Shiva has been courted by environmental organisations, politicians and the media") and makes serious wrongful accusations ("disinformation and spreading conspiracy myths") which are not credibly substantiated. In no way can this be justified by freedom of the press or freedom of opinion, especially since it is supposed to be a so-called fact check.

The task of a public service media is to offer objective, comprehensive, neutral and balanced information through independent, critical and responsible journalism and to provide factual, clear and non-tendentious orientation in today's flood of information. In the case of the present Fact Finder article, this has definitely not been achieved.

Together with the previous accusation of "bending the truth" in the report "Titel, Thesen, Temperamente" of 26.11.2022, the ARD has, in our opinion, violated both its <u>duty of care</u> and the personal rights of Vandana Shiva. According to press law, there is at least a right of counterstatement ("right to reply").

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An English translation of the German Fact Finder article discussed in this analysis can be found here: https://allnewspress.com/indian-activist-shiva-eco-icon-with-questionable-views

The original German version of this analysis and counterstatement is available here: https://vandana-shiva.de/wp-content/uploads/2023/01/analyse-ard-faktenfinder-und-gegendarstellung-30012023.pdf