

# Vandana Shiva: Respect for Life [B2]

Questa ambientalista e attivista indiana, dottore in fisica nucleare, è una delle voci più rispettate nella lotta contro il cambiamento climatico. Avversa al catastrofismo, garantisce la speranza e la possibilità di contribuire alla salvezza del pianeta.

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The Indian [physicist](#), ecologist and activist Vandana Shiva is an iconic figure in the environmental movement. Born on 5 November 1952 in Dehradun, the capital of the northern Indian state of Uttarakhand, Dr. Shiva [trained](#) as a [physicist](#) in India, completing her [PhD](#) in quantum theory in Canada. She then conducted inter-disciplinary research in science, technology and environmental policy, founding the Research Foundation for Science, Technology and Ecology in 1982. She went on to co-found the independent research institute Navdanya, a hugely-influential [NGO](#) that acts in defence of biodiversity and promotes the [welfare](#) of small farmers.

## THE NATURE OF NATURE

Shiva has published over twenty books. In her most recent, *The Nature of Nature: The Metabolic Disorder of Climate Change*, Shiva [warns](#) that the [push for](#) a technology-oriented, digital agricultural solution to climate change is “bad science.” She says that Big Tech and Big Ag are comprised of the same companies that polluted the planet in the first place, and we should not trust them to save it.

## THE BIG PICTURE

To find out more, Speak Up attended a conference at Pompeu Fabra University in Barcelona in which Shiva received an honorary doctorate. In her acceptance speech, Shiva said that we must resist the [urge](#) to catastrophise about the climate crisis. It only makes us feel [hopeless](#), she says, and convinces governments to let big companies [sweep in](#) and take control. As she explained, her own career has taught her that simple science is never the

whole story. **Vandana Shiva (Indian accent):** The reason I left a nuclear career is when my sister asked me about radiation. And we're not taught that, we're taught about chain reactions, but we're not taught about the health impact. For me knowledge is about the whole, it's about the system. And I can't develop a knowledge where I know how to generate energy and I've no idea what it does to the human body.

## EVERYTHING IS CONNECTED

As Shiva explains, living systems are based on interconnectedness and self-organisation, something that quantum [physicist](#) Erwin Schrödinger called "negative entropy" in his popular science book *What Is Life?*. **Vandana Shiva:** Schrödinger wrote a book on what is life, and he says living systems are alive and they have negative entropy. All mechanical systems are [put together](#) from the outside and they release positive entropy, which is where the pollution comes in, which is where the emissions come in, which is where the heating comes in. The plants and microbes have cooled our planet from 290° to 13°, from 98 per cent carbon dioxide to 0.03 per cent. Why aren't we talking about that aspect of the planet's creative energies? Photosynthesis for me is a technology of the plant.

## CONSTRUCTS

We should [beware](#) of constructs like capital, says Shiva, which promises to make us rich. True wealth comes from nature, she says. **Vandana Shiva:** This construct called capital: it can't do anything! Wealth is created by nature, by the [soil](#), by the plants, by the seed[s], by people who work with nature. The mechanistic world view has always been very artificial. We created instruments to make everyone think that you're essential, nature is passive, intelligence is fixed... These measures actually measure much more the [deceptions](#) of a controlling mind than the reality of a living world. There is no fixed thing in the world. What exists in the world is consciousness, potential, evolution, interaction, interconnectedness.

## CATASTROPHE!

Read the newspapers and they may terrify you. We are told that the planet is at its limits, one more degree and that's it. But this is all part of the same problem, says Shiva. **Vandana Shiva:** We often exaggerate the destructive power of some people who project their power, and that's where [hopeless](#)ness starts [to seep in](#), because one construct is made to look like the inevitable future of humanity rather than the many possibilities that we live in and have. So separating is the beginning of violence and seeing the interconnectedness is the beginning of peace, including peace with nature. It's the seed that has taught me so much: a coconut will never give me an [oak tree](#), the patterns are built into the seed. Show me a seed who [which] says "I won't give you plants until you give me a royalty."

## MORE OF NOTHING

We tend to measure progress by [yield](#), amount rather than quality. We are told that the population is too large and resources are limited. However, imbalance is the problem, not actual resources. Producing more low quality food will not satisfy us; on the contrary, fertilisers used to expand [yield](#) will poison us. **Vandana Shiva:** Yield doesn't measure how much the [soil](#) and biodiversity has regenerated, it definitely doesn't measure the wellbeing of the farmer and it doesn't measure the quality and health in what is produced. So we are creating nutritionally-empty commodities full of toxins: 75 per cent of diseases [are] related to ultra-processed food, chemically toxic food; [soil](#) is dying, 70 per cent water is gone, ten times more water is used, 93 per cent biodiversity gone... Because every chemical in agriculture, its only purpose is to kill. Insects? Finish them off with insecticides. Plants which give us our climate, give us our food, give us our [nourishment](#), we must declare most of them [weeds](#) and useless and create herbicides [to wipe them out](#).

## SOVEREIGN KNOWLEDGE

Shiva's new book disputes the claim that the climate can be engineered to save the planet. Genetically-modified organisms (or GMO) are one example, as she explains. **Vandana Shiva:** We see the Earth too as a mechanical object to be manipulated, the climate to be engineered. When the same industry that brought us pesticides and chemicals [was ] saying "Now we will do genetic engineering in order to take patents on seed, and we must have an international law to prevent farmers from saving seeds," I said: "Every sentence of yours is bad science. So for you GMO means '[God Move Over](#)' because a patent [is granted](#) for an invention, something you have created. A seed is not created." You might add a gene by agrobacteria, but that one addition of a gene is not making the seed. The seed makes itself. Our ancient [wheats](#) never caused gluten allergy, so Monsanto had patented our [wheats](#) — one third of Europe is full of gluten allergy, so what a big market! — we challenged that.

## BEWARE BIOPIRACY

GMO is biopiracy, says Shiva. Only Indigenous knowledge is original knowledge, and it is freely shared. **Vandana Shiva:** All Indigenous knowledge is [sovereign](#) knowledge. What language you use to describe a phenomena doesn't change the content and process of that phenomena, it's just a description: chemists describe it one way, Indigenous people will describe it in another way. Indigenous knowledge is translated into the metaphors of whatever is the discipline of contemporary knowledge, and that is called 'the invention'. But biopiracy is not an invention; it's [theft](#).

## IN HIGH PLACES

Shiva works with the Indian government. [Allies](#) can also be found in [high places](#), she says. **Vandana Shiva:** They adopted a law that plants, animals and seeds are not human inventions, therefore they cannot be patented. Therefore, seeds have no patent in India. The [neem tree](#): it's used for [fodder](#), it's used for food, it's used for our dental care, I watched my

grandmother using neem to protect our grain. And then the US government and a big chemical company [claims](#) to have invented the use of neem for [pest control](#) and [fungal control](#). So, we fought a case for eleven years with nothing except truth on our side, love and friendship on our side. I contacted the head of the Greens in the European Parliament and I brought a hundred thousand signatures to the European Patent Office. The neem won.

## RESPECT FOR LIFE

Shiva advocates for a [shift](#) in understanding from the economy of control to the economy of care, of each other and of the planet. **Vandana Shiva:** All of this at the end of the day is about our relationship with a diverse beautiful Earth. The economy of care is the biggest economy that sustains all of the economies. Nutrition is what matters: we can feed two times the world population by conserving and regenerating biodiversity; we do not need to be at war with nature [in the pretence](#) of feeding the world. When our gut microbiome is nourished, we are healthy. So the whole system is flowering again. And all of this begins with respect for life.

## TREEHUGGING

The practice of [treehugging](#) gained prominence in the late 20th century. The Chipko movement in India's Uttarakhand region, in which Vandana Shiva was involved, is possibly the most famous early example. The Chipko movement has its roots in the 1970s when the residents of the village of Chamoli, predominantly composed of the Bhotiya Indigenous tribe and local women, protested [widespread](#) deforestation by [embracing](#) the trees. The word 'chipko' means 'hug' or 'cling' in Hindi, and the word became synonymous with the movement itself. This action brought global attention to the cause and inspired similar movements worldwide. Ecopsychology, a field that explores the relationship between humans and the natural world, recognises the therapeutic benefits of spending time in nature and sees [treehugging](#) as a means to [foster](#) a deeper connection. It is seen as a way to cultivate a sense of [grounding](#), connectedness and harmony with the environment,

enhancing the well-being of individuals. So don't doomscroll through the [awful](#) headlines, go hug a tree instead.

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# Glossary

- **hopeless** = senza speranza
- **is granted** = concedere
- **sovereign** = sovrano
- **claims** = affermare
- **grounding** = connessione con la terra
- **awful** = terribili
- **urge** = brama, urgenza
- **deceptions** = inganni
- **to wipe them out** = eliminare
- **shift** = cambio
- **sweep in** = intromettersi
- **to seep in** = filtrare
- **fungal control** = controllo dei funghi
- **in the pretence** = con la pretesa di
- **treehugging** = abbracciare gli alberi
- **embracing** = abbracciare
- **soil** = terra
- **nourishment** = cibo, alimento
- **God Move Over** = modalità Dio finita
- **wheats** = grano
- **widespread** = diffusa
- **foster** = promuovere
- **physicist** = fisica
- **PhD** = dottorato di ricerca (Philosophy Doctor)
- **put together** = mettere insieme
- **weeds** = erbacce
- **Allies** = alleati
- **neem tree** = nīm
- **welfare** = benessere
- **theft** = furto
- **warns** = avvertire
- **beware** = fare attenzione a
- **yield** = raccolta

- **fodder** = mangime
- **trained** = formarsi, studiare
- **NGO** = ONG, organizzazione non governativa (non-governmental organization)
- **push for** = spingere verso
- **oak tree** = quercia
- **high places** = alte sfere
- **pest control** = disinfestazione