

# Rediscovering Ancient Indian Wisdom: A Path to Sustainable Solutions

**Conversation with**

**Prof. A.V. Ramachandran**

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This conversation explores a fascinating intersection of the past and present. Amidst present complex global challenges such as climate change, social inequality, and mental health struggles, there is an increasing call to look beyond only the latest technological advancements. Immense possibilities exist for the quest for answers amongst which the ancient wisdom that has shaped human civilizations for thousands of years offers potentially sustainable solutions. National Education Policy 2020 encourages revisiting and relearning from the Indian Knowledge System. Let us engage in a discovery of ancient knowledge wisdom from the perspective of a scientist with Prof A V Ramchandran.

Prof. Ramachandran is a renowned academic and researcher with decades of expertise in Life Sciences, Zoology, Endocrinology, and Developmental Biology. His pioneering work spans regenerative biology, hormonal programming, and metabolic physiology, significantly contributing to understanding developmental plasticity and reproductive processes. He has received numerous accolades for his research and has mentored many scholars globally. In recent years, he has focused on integrating science and spiritualism holistically.

**Jerrin Jacob:** Are there specific scientific fields or disciplines that you find particularly helpful in exploring ancient wisdom?

**Prof. A.V. Ramachandran:** Yes, some scientific fields such as quantum physics or neuroscience provide fascinating guidelines for exploring concepts that resonate deeply with ancient wisdom. Quantum physics for example presents ideas like entanglement which shows how particles can be instantaneously connected no matter the distance between them. This aligns with ancient wisdom or spiritual beliefs around interconnectedness and the idea that everything in the Universe is intricately linked.

Neuroscience also intersects with ancient wisdom especially in how it studies the effects of meditation and mindfulness on the brain. Research has shown that meditation can change the brain's structure, enhancing qualities like empathy and emotional regulation. This scientific evidence validates long-standing spiritual practices suggesting that personal transformation is possible and has measurable effects on the brain.

**Jerrin Jacob:** Do you think Ancient Indian Wisdom will be helpful to tackle modern environmental challenges?

**Prof. A.V. Ramachandran:** Absolutely. So, as we know the source of ancient Indian wisdom is deeply found in texts such as the Vedas, Upanishads and Bhagavad Gita which offer significant and valuable lessons for living sustainably in today's time. These scriptures are not only just old writings, but also important ideas for addressing current environmental challenges. One key principle associated with those texts is Ahimsa or non-violence, which emphasises respecting all forms of life including the environment and, in a way, the entire Universe. Ancient India also practiced sustainable farming methods that reduced harm to nature and valued revered forests that helped protect biodiversity, highlighting a harmonious relationship with the natural world.

**Jerrin Jacob:** Do any ancient philosophies highlight the importance of balance and responsibility in our interactions with the environment?

**Prof. A.V. Ramachandran:** Yes, ancient concepts like Rita, Brahman, and Dharma emphasise the importance of balance, unity, and responsibility in caring for the Earth. The Vedas introduced the idea of Rita or cosmic order which shows the delicate balance seen in the Universe. It reminds us of our connection to all living things and the need to care for the Earth.

The Upanishads went deeper and discussed the unity of everything (Brahman), highlighting how important it is to honor that unity through our actions.

Our Holy Book- the Bhagavad Gita serves, is a practical guide for life, emphasizing Dharma or our duties and purposes. It encourages us to fulfill our roles in ways that help everyone which calls for responsible care and a long-term perspective when we interact with the environment.

**Jerrin Jacob:** In your opinion, what are the Real-World Solutions for the problems we face today?

**Prof. A.V. Ramachandran:** There are a good number of solutions that we can follow from the ancient world approaches in tackling the current world problems. Firstly, an **Eco-Friendly Economic approach**. The Vedic principle of ‘apana,’ or ‘taking only what is needed,’ aligns well with an eco-friendly economy’s goals. These traditional practices such as using every part of a plant, support and encourage this idea. Another approach which we can adopt is **Conscious Shopping**. The Bhagavad Gita emphasises moderation (yoga) and letting go (vairagya) encouraging mindful shopping. By practicing ‘svadhyaya’ (self-study), we can better understand our true needs and reduce our environmental impact. **Appreciation for Nature** is another important approach we can inculcate in our lifestyle. The respect for rivers, trees, and other natural elements in India is called ‘gram-devata,’ It fosters a strong sense of community and collective responsibility for the environment. This unity is very much essential for addressing global environmental challenges.

**Jerrin Jacob: How do you see the role of spirituality in shaping scientific curiosity within a community?**

**Prof. A.V. Ramachandran:** Spirituality brings a mindful awareness and responsibility to scientific practice. It promotes humility in pursuing knowledge, reminding us that science is part of a larger quest to understand life and its mysteries. This perspective encourages all to pursue knowledge for its own sake and in a way that benefits humanity and the planet. By integrating values like compassion, respect, and responsibility, spiritual perspectives can provide a moral compass, helping every one of us to navigate the social and ecological impact of our work in ways that honor the interconnectedness of all life.

**Jerrin Jacob: How can we use ancient teachings to address the challenges of the 21st century and create a sustainable future?**

**Prof. A.V. Ramachandran: Application is the Answer.** By applying these ancient teachings in our everyday lives, we can certainly create a future where people and our planet can thrive together. This also means that we should not ignore modern advancements but improve them with our ancestors' wisdom.

*As we face the challenges of the 21st century, let us draw from the past to help us build a sustainable future.*

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Prof. A. V. Ramachandran is a distinguished academic and researcher with over 56 years of experience in the fields of Zoology, Developmental Biology, Endocrinology, and Reproductive Physiology. He completed his PhD in 1972 at The M. S. University of Baroda, focusing on biochemical and histochemical aspects of tail regeneration in the Scincid lizard, *Mabuya carinata*. Over the years, Prof. Ramachandran has held several significant positions, including Professor of Zoology since 1988, Head of the Department of Zoology from 1998 to 2008, and Dean of the Faculty of Science from 2003 to 2008 at The M. S. University of Baroda. He also served as the Honorary Director of the All-India Civil Services Training Centre at the university from 1997 onwards. His academic journey includes collaborations with esteemed institutions, including the Cancer Research Institute in Bombay and the Department of Endocrinology at the University of Madras, where he conducted pioneering research in endocrinology and cell biology. He significantly contributed to regenerative biology, reproductive endocrinology, and metabolic physiology. He is recognized for pioneering research on tail regeneration in reptiles, particularly lizards, establishing India as a key centre for regenerative studies. His work on the pineal gland's role in reproductive and metabolic processes, especially in birds and mammals, has also earned him international acclaim. Prof. Ramachandran's research also includes exploring neonatal hormonal programming and its effects on metabolic disorders, such as diabetes, and the concept of developmental plasticity.

He has guided 31 doctoral students, many pursuing global post-doctoral research and academic careers. He has published about 300 research papers with more than 4700 citations, maintaining one of the highest research profiles at The M. S. University of Baroda. His scientific excellence has been recognized with numerous awards, including the International Society of Andrology Award for "Scientific Excellence" in 2001 and the prestigious "Prof. Pera Naidu Govindarajulu Gold Medal" for his career research in reproductive endocrinology. Through his contributions to research and mentorship, Prof. Ramachandran has left a lasting impact on the scientific community.

After retiring from active service in 2008, he has devoted himself actively to his lifelong interest in spiritualism. Having a background in science and being innately drawn to spiritualism, Prof. Ramachandran has been involved in linking the two and establishing scientific spiritualism and spiritual science. He believes that spiritualism and science have been more dogmatic and less pragmatic as they have tended to remain dualistic and on opposite poles. According to him, neither side rationally attempted to end this dualism and integrate it into merged oneness. He strongly believes that consciousness-integrated holistic science and scientifically driven holistic spirituality are not mutually exclusive but mutually inclusive. Prof. Ramachandran has a number of books, some translated and some original scripts, related to these fields.

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Mr. Jerrin Jacob is a seasoned professional with over 8 years of experience in education, counselling, and project coordination. He has worked in various capacities, including as a teacher, a school counsellor, and a project coordinator, before joining Navrachana University.

Mr. Jerrin is a double NUV alumni, who holds a bachelor's degree in computer applications (2009-2012) and a master's degree in social work (2016-2018). His academic interests are reflected in his research during master's on the challenges faced by female students in primary schools in Vadodara. He further expanded his expertise with a Post Graduate Diploma in Guidance and Counselling from Maharaja Sayajirao University in 2021, a Diploma in Hospital Administration from TUV-SUD - ISSD and recently graduated with a Master of Divinity from Carmel Theological Seminary, Trivandrum. Currently, Mr. Jerrin Jacob is currently a Teaching Assistant at the School of Liberal Studies and Education at Navrachana University, Vadodara.