

Laureates Profile

A Global Leader Creating Peace at the Forefront of Climate Change

Anote Tong

His Excellency Anote Tong, the President of Kiribati, is a global leader whose dedication and passionate leadership helped to bring about a consensus by the international community concerning climate peace. He dedicated himself to raising public awareness of the severe impacts of the climate crisis to the international community in order to address its impacts on his country of Kiribati, which is gradually being submerged due to rising sea-levels caused by climate change. Also, he worked for the rights of climate refugees to make sure his country's citizens who are at risk of being the victims of this climate crisis, will be able to keep their dignity if they are forced to migrate. Furthermore, he is leading the cause to designate a large part of the Pacific region as an environmentally protected area, while forgoing immediate financial benefits to his country for the climate peace of the future generations.

- Anote Tong is the president of Kiribati, a small island nation located in the Pacific Ocean that is threatened with submersion by 2050 because of the rising sea levels caused by climate change.
- Kiribati has a population of 103,000. Eighty percent of the citizens' livelihoods, 40 percent of the national income and 90 percent of the country's protein comes from the ocean.
- The sea-level rise is causing food and water shortages, reduced land area, overpopulation and rapid increase in diseases from water pollution.
- President Tong designated 408,250 square kilometers of his country's waters as a "marine protected area."
- To prevent his people from becoming "climate change refugees" who do not receive proper human rights, President Tong is offering vocational training for a "mass migration with dignity" plan.
- As part of the plan, trained nurses and technicians have begun to resettle in Australia and New Zealand.

- In 2014, President Tong purchased 2,000 hectares of land in Fiji and is considering relocating his population.
- President Tong believes that climate change is the largest moral challenge of the 21st Century.
- President Tong has appealed to the UN General Assembly to work to address the dangers of climate change.
- President Tong helped organize the Pacific Oceanscape which, if designated as a marine protected area, will conserve 10 percent of the world's oceans as a gift for future generations.

President Anote Tong

- Born on 11 June 1952, Fanning Island, Line Islands, Kiribati
- Married to Meme Bernadette, 8 children

■ Professional background

- 1974~1976 : Assistant Secretary (Development), Economic Planning Office,
Ministry of Finance
- 1976~1977 : Senior Assistant Secretary, Ministry of Education
- 1978 : Director of Economic Planning, Ministry of Economic Planning
- 1978~1980 : Project Officer, South Pacific Bureau for Economic Cooperation (SPEC)
- 1980~1982 : Secretary for Ministry of Communications & Works
- 1982~1983 : Secretary for Ministry of Natural Resources Development
- 1983~1992 : Director, Atoll Research and Development Unit, USP
- 1993~1994 : Administrative Secretary, Pacific Air-Services Alliance Corp (PASA)
- 1994 : Elected Member of Parliament for Maiana
- 1994~1996 : Minister of Natural Resources Development
- 1996~2003 : Member of Parliament (Boutokaan Te Koaua party)
- July 2003 : Elected President of Kiribati
- October 2007 : Re-elected President of Kiribati

■ Major awards

- 2008 David B. Stone Award (New England Aquarium Foundation)
- 2009 Taiwan Medal Order of Brilliant Jade with Grand Cordon, Speaker of the Legislative Yuan
- 2012 Peter Benchley Ocean Award (Blue Frontier Campaign)
- 2012 Hillary Award (Hilary Institute of International Leadership)

■ Main achievements

1. Led the international community to act on climate change

His Excellency Anote Tong, President of Kiribati, actively informed the international community about the climate crisis facing low-lying Pacific small island states due to rising sea levels, and led the international community to actively embark on addressing this issue. Even though immediate assistance and cooperation was needed by the international community to achieve climate peace for the future generations by reducing carbon emissions, and adjusting negative developments that threaten the environment, etc., conflicting interests among countries made for a sluggish show of pace. Thus, in order to raise international awareness on the climate crisis issue, Pres. Tong invited world delegates to Kiribati and held the Tarawa Climate Change Conference (TCCC) on 12 Nov. 2010 and adopted the Ambo Declaration. This is an 18-point resolution calling upon major economies including China and vulnerable nations to address the causes and adverse impacts of climate change, and urge them to embark upon immediate and concrete action. This agreement between the nations was presented at the larger international climate change summit, the UNFCCC (United Nations Framework Convention on Climate Change) COP (Conference of Parties) 16 in Cancun, Mexico, and became the basis for the economically developed countries to support countries such as Kiribati vulnerable to climate change. Furthermore, he played a core role in gathering support so that the major economies and developed countries can both actively cope with climate

change.

2. Led the protection of marine ecosystems by paying a price for the future generations

In order to protect the ocean from pollution caused by human greed and intemperance, Pres. Tong let go of his country's immediately profitable assets in order to protect the marine ecosystem. He led the world's largest marine protection and ocean management initiative by area in the 'Phoenix Islands Protected Area' designation, and 'Pacific Oceanscape Network Initiative', etc., and actively took the lead for the conservation of the Pacific Rim as the resource repository for the future generations and the basis for peace.

Efforts to conserve the Pacific Rim started with first relinquishing his own country's real profitable assets. In 2006, Pres. Anote Tong worked with CI (Conservation International) and the New England Aquarium to create the Phoenix Islands Protected Area (PIPA), encompassing some of the most pristine and coral-rich waters on the planet. Upon its full legal establishment in 2008, PIPA expanded to include more than 400,000km² of ocean prohibiting fishing and other exploitations, making it the world's largest marine protected area at the time. Two years later it was declared a UNESCO World Heritage Site. The area's rich biodiversity includes an abundance of healthy corals, big sharks, groupers, tuna, giant clams and other marine animals that have been depleted in much of the rest of the world. The Phoenix Islands is also a major source of revenue for the people of Kiribati with its beautiful environment and rich species of fish. Therefore, prohibiting fishing activities and conserving the area also means that the Kiribati economy has had to endure a substantial blow. Yet despite all this, Pres. Tong passed a law prohibiting all commercial fishing within the Phoenix Islands Protected Area explaining that, "These efforts are a significant contribution to the world community in the hope that they would also act."

Going further, Pres. Tong conceived the Pacific Oceanscape framework, an unprecedented

effort among 23 Pacific island nations to collaboratively and sustainably protect, manage, and sustain nearly 40 million km² of ocean. The Pacific Oceanscape concept was introduced to the Pacific Islands Forum by Kiribati in 2009. The Framework for the cooperative stewardship of their combined ocean territories was presented a year later, receiving unanimous endorsement by the heads of state and governments of 15 participating nations. Together, the nations of the Pacific Oceanscape have responsibility for some 10% of the world's ocean surface, an area four times the size of the United States.

3. Committed to ensuring the dignity of human rights for climate refugees

Pres. Tong is devoting a significant amount of his energy into defending the rights of his citizens, and contributed greatly in building awareness among the international community on the protection of human rights for climate refugees.

Pres. Tong is establishing a systematic migration policy so that his country's citizens, who will be forced to leave Kiribati within the next 30 years due to rising sea levels submerging their country, can migrate with their dignity intact. First, he worked diligently to secure funds to buy land for the resettlement, purchasing 24.28 million m² of land in Fiji, and is running the 'migration with dignity' vocational education program so that they will not be treated as unstable 'refugees' but as valuable members of the work-force with competitiveness and marketability. Even as hope seemed to diminish as his country's citizens faced the possibility of losing their homes due to climate change, Pres. Tong's warm love for humanity shined brightly as he strove to safeguard human dignity, and established various expert vocational training programs such as nursing, seamanship, horticulture gardening, etc. as well as linguistics. These efforts by Pres. Tong contributed to the international community urging for higher cooperation for the human rights of climate refugees and cooperation amongst countries regarding migration.

Alternative Solution to the Future Food Crisis, Pioneer of the Blue Revolution

Modadugu V. Gupta

As a fisheries scientist, Dr. Modadugu Vijay Gupta of India's involvement in research spanning a period of 5 decades in a number of countries in Asia, Africa and the Pacific, resulted in significant increase in fish production and laid foundation for the Blue Revolution. As a food resource able to provide relatively low-cost, high quality animal protein, aquaculture has emerged as a possible solution to address the looming food crisis and nutrition insecurity as a result of population increase and climate change. Dr. Gupta spent his entire life developing environment friendly aquaculture methods/technologies using agriculture wastes and by-products along with innovative implementation practices that benefitted small-scale farmers and addressed issues of poverty, nutritional deficiency, and self-resilience in South and Southeast Asia, and enthusiastically organized and educated the poor spreading his methods of aquaculture. Moreover, he actively taught aquaculture to women with low social status, leading to major improvements in women's rights and their empowerment. Ignoring threats to his own life and devoting himself to research in war-torn conflict areas, Dr. Gupta's efforts to develop low-cost methods of aquaculture has created a possible solution that can overcome the food crises as a result of anticipated population explosion and impact of climate change.

- Dr. Gupta is an Indian fisheries scientist who is also known as the “Architect of the Blue Revolution for hunger eradication.” He dramatically mitigated the Southeast Asia hunger crisis by spreading his methods of fish cultivation.
- He focused on disseminating his aquaculture methods to rural women with low social status in Southeast Asia and opened the door for them to participate in economic activities, thereby improving their income and nutrition, protecting their rights, and improving their status.
- He is one of the world's foremost authorities on fish genetics research, and he has worked to establish a global network to increase the world fish supply.
- Throughout his life, he has lived in areas of extreme poverty and devoted himself to researching and spreading his methods of aquaculture and adapting them for local needs.
- In 2005, Dr. Gupta received the World Food Prize, considered the “Nobel Prize for Food and Agriculture.”

Modadugu V. Gupta

Born 1939. 8. 17. India

Calcutta University Ph.D. in Biology

■ Key positions and professional affiliations

- . 1962-1971 : Indian Council of Agricultural Research, Assistant Research Officer
- . 1971-1977 : Scientist, Indian Council of Agricultural Research (ICAR),
- . 1977-1981 : Economic and Social Commission for Asia-Pacific (UN-ESCAP), Fish Breeding Expert, Mekong Secretariat (Lao PDR)
- . 1981-1985 : Economic and Social Commission for Asia-Pacific (UN-ESCAP) Senior Aquaculture Scientist, Mekong Secretariat, Thailand
- . 1985-1986 : Senior Fish Farm Management Scientist and Project Leader, Mekong Secretariat, Lao PDR
- . 1986-1989 : UN-FAO Fish Culture Specialist/Officer-In -Charge (Bangladesh)
- . 1989-1996 : Senior Aquaculture Specialist/Officer-In-Charge, WorldFish Center (CGIAR) in Bangladesh, Malaysia, Philippines
- . 1989-2008 : Implemented/coordinated projects and programs in over 20 countries in Asia, Africa and the Pacific
- . 1996-2002 : Director, International Relations, Worldfish Center (CGIAR)
Research Coordinator, International Network for Genetics in Aquaculture (INGA), initiating aquaculture genetics research projects in Bangladesh, China, Ivory Coast, Egypt, Fiji, India, Indonesia, Malawi, Malaysia, Philippines, Thailand, Vietnam, etc. that resulted in a number of improved strains of fish.
- . 2003-2004 : Assistant Director General, International Relations and Partnerships, Worldfish
- . 2005-present : Dr. Gupta' advisory services were taken advantage by a number of international organisations such as: The World Bank; The Asian Development Bank; United Nations Development Program (UNDP); Commonwealth Secretariat, Food and Agriculture Organisation of UN

(FAO); Mekong River Commission; Danish International Development Agency (DANIDA); London; United States Agency for International Development (USAID); Agriculture Research Center of Netherlands; etc., for their programs in different countries of Asia and Africa.

■ Major honors and awards

- . 1978 Outstanding team research in developing low-input, high output aquaculture methods <Indian Council of Agricultural Research (ICAR)>
- . 2005 World Food Prize <World Food Foundation >
- . 2007 Gold Medal <Asian Fisheries Society>
- . 2009 Honorary Life Member Award <World Aquaculture Society>
- . 2010 Eminent Agriculture Scientist Award <Government of Andhra Pradesh, India>
- . 2015 Nutra India Summit Life Achievement Award <Nutra India Summit>

■ Key achievements

1. Addressed the expected future food crisis due to climate change, and led the Blue Revolution

Through field research and development of aquaculture methods/technologies suitable for the climate and environment of South and Southeast Asia, Dr. Gupta caused an explosive increase in production known to us now as the Blue Revolution. Having the insight that aquaculture, being able to provide relatively low-cost animal protein, would be the key to solving humanity's future food crisis, since the 1960's Dr. Gupta researched and developed compatible fish species that could both thrive in a hot and humid climate and a low-lying environment with seasonal floods. Especially from the latter part of the 1980's, he correctly identified fish species such as 'tilapia' and 'silver barb ', which could thrive even in the turbid and shallow waters of Bangladesh and reach market size in five months. As a result, Bangladesh annual fish production in 1986 which was only about 170,000 tons when the research started, soared to about 850,000 tons when Dr. Gupta retired in 2004. Since 2000, going beyond Asia, Dr. Gupta has striven to develop the right methods of aquaculture that may thrive in Africa, the frontline of world hunger.

2. Miraculously brought independence and self-sufficiency to the extreme-poor through the spread of innovative aquaculture methods

Dr. Gupta is a saint of the South and Southeast Asian poor, who rather than give fish to the poor and hungry, taught them how to farm fish, cultivating a miracle of independence and self-sufficiency. In order to address the hunger and nutrition deficiency problem of the extreme poor in South and Southeast Asia, Dr. Gupta developed low-cost, highly-efficient methods of aquaculture, and devoted himself to passing down his methods while living with the poor in their environment. As a result, those living in a vicious cycle of extreme poverty and hunger, not just greatly improved their nutritional status, but further instilled in them the hope for a better life.

In the 1970's, India as a whole was focused on developing high-end aquaculture requiring expert methods and high costs such as shrimp farming benefiting the better-off farmers. However, during this period Dr. Gupta's attention was on researching aquaculture methods that were low-cost and highly efficient and could be easily managed by the extreme poor and marginal farmers, developing such methods as 'fish polyculture', the culturing of a diversified mix of fish species in one pond, and 'integrated aquaculture-agriculture', called the eco-friendly method combining aquaculture and agriculture.

Furthermore, Dr. Gupta built partnerships with the local communities and worked tirelessly to teach his methods to the poor. Starting with small groups of 5~10 landless poor farmers in each group, he helped them to become motivated and taught them aquaculture skills. He worked to create a basis for their economic independence through fish farming in leased ponds with minimum financial support for the start-up costs for fish farming.

3. Significantly improved the social status and rights of Asian women

Dr. Gupta actively spread aquaculture methods to South and Southeast Asian women with a low social status, resulting in not only increased household incomes and nutrition, but also drastically improved the social status and rights of women. Aware of the fact that some women in poor households in South and Southeast Asian countries have no income because they do not participate in economic activities, Dr. Gupta prepared opportunities for women to

participate in economic activities. He personally convinced some of the religious leaders who were negative towards women's participation in society to allow them to participate more, and motivated women to be self-sufficient and educated poor women farmers on the basic skills required for aquaculture. In addition, he cooperated with local organizations so that women could receive the funding and land necessary for their economic activities. These initiatives were such a great success that now women form considerable work force in fish farming, and this has brought positive changes that has improved women's rights and status both within the household and in the Society.