

FRANCESCO NICOLA TUBIELLO

francinvro@me.com

BIOGRAPHICAL SKETCH

US and Italian national with thirty years-experience and international recognition as a leader in science and innovation in the fields of sustainability, climate change and agri-food systems. Extensive experience in academia, private sector and international agencies in formulating, managing and implementing science-based policy-relevant programs.

EDUCATION

1995 Ph. D., Earth Systems and Agriculture. New York University, New York, NY, USA.
1992 M.S., Agriculture and Environment, New York University, New York, NY, USA.
1989 M.S. and B.S. (Italian Laurea) in Physics, *summa cum laude*, University of Turin, Italy.

PROFESSIONAL EXPERIENCE

2015-present Senior Statistician and Team Leader, Environment Statistics, FAO, Italy
2011-2015 Natural Resources Officer and Project Coordinator, FAO, Italy
2010-2011 Chief of Science & Technology, *GET-Carbon LLC, USA*
2009-2010 Senior Climate Change Scientist, *European Commission Joint Research Center*
2002-2008 Research Scientist, *Center for Climate Systems Research, Columbia University and NASA Goddard Institute for Space Studies, USA*
2004-2008 Visiting Research Scholar, *International Institute for Applied Systems Analysis, Austria*
1996-2002 Associate Research Scientist, *CCSR, NASA and Columbia University, USA*
1995-1996 Postdoctoral Research Sc., *CCSR, NASA and Columbia University, USA*
1990-1995 Staff Scientist, *Environmental Defense Fund, USA*

AWARDS AND RECOGNITIONS

Reuters Hot List of World Climate Scientists, 2020
Kavli Foundation Speaker, 2008
Nobel Peace Prize (IPCC), 2007
NASA Land Cover/Land Use Change Research Award, 2004-2007
US National Science Foundation Research Award, 2002-2004
US National Science Foundation International Fellow, 2002

CURRENT POSITION

2015-Present. Senior Statistician and Team Leader, Environment. Statistics Division, FAO, Italy.
Current: Lead the Environment Statistics Unit at FAO (15 staff, 1 million USD annual budget) towards efficient data collection, analysis and dissemination in FAOSTAT of national statistics and indicators for fertilizers, pesticides, land use and land cover, climate change and agrifood systems. Methodological development in the context of 2030 SDGs, with focal point responsibilities for government advice in the context of SDG 2.4.1 and UNFCCC monitoring and reporting processes. Development of new methods for use of big data and earth observations to generate novel statistical knowledge and fill data gaps, for evidence-based decision making in member countries and global knowledge generation. Interactions with private sector and academia for joint development and publication of high-impact papers on new methods and data products. Fund raising and project development to achieve above objectives in coordination with donors. Development and implementation of statistical methods for uptake at the UN Statistical Commission, including the System of Environmental and Economic Accounting for Agriculture, Forestry and Fisheries, and the Set of climate change statistics, with UNECE, UNSD, OECD, EUROSTAT, World Bank, IMF, UNFCCC and member countries.
<http://www.fao.org/food-agriculture-statistics/data-release/environment/en/>

PREVIOUS POSITIONS

- 2011-2105** **Natural Resources Officer and Project Coordinator.** Climate, Energy and Tenure Division, *FAO, Italy*.
Coordinator of a multi-disciplinary, multi-departmental trust fund project aimed at improving the capacity of developing countries to assess and report their greenhouse gas emissions and mitigation potential, in the context of sustainable natural resource management and food security. Led a team of three professional officers and over 10 international consultants, in coordination across FAO departments, relevant international agencies and research institutes. Results achieved: design, implementation and dissemination, including international recognition at IPCC and UNFCCC levels, of the FAOSTAT emission database for agriculture and land use; capacity building delivered to over 100 countries worldwide, with focus on developing and least-developed countries; built robust cooperation between FAO, IPCC, UNFCCC, and other relevant international partners. Other duties included team management, budgeting and reporting to donors; organization of regional meetings and workshops; implementation of pilot case studies in the field; linkages to relevant international policy and science processes.
- 2006-2011** **Chief of Science & Technology, GET-CARBON, LLC, New York USA**
International project development, management and capacity building, focusing on policy advice and technical support to developing countries for climate change risk assessment, adaptation and mitigation solutions, with a focus on agriculture and land use. Managed a team of senior and junior consultants for all science and technology projects of the firm. Activities included field projects design, implementation and management of carbon sequestration projects in forest, agriculture and renewable energy, conduction of capacity building workshops on linkages between sustainable development and natural resources.
- 2009-2010** **Senior Climate Change Scientist, European Commission, Joint Research Center, Italy**
Senior project scientist in the area of climate change impacts, adaptation and mitigation in agriculture and water resources—supporting a multidisciplinary team of senior and junior scientists towards development of climate change impacts and response analysis tools. Provided support to the European Commission towards improvement of adaptation and mitigation strategies of developing countries, of relevance to rural development. Organized and participated in regional and bilateral meetings and conferences on behalf of the EC.
- 1995-2008** **Research Scientist, Columbia University and NASA-Goddard Institute Space Studies, USA**
Research, design and implementation of multi-disciplinary, international projects and programmes on the impacts of climate change on food and agriculture, with a focus on food security, integrating global economic analysis and crop models. Organization of meetings and workshops for promoting partnerships and communication to both the public and specialized agencies. Management of international projects, including: IIASA (global agro-ecological model, 2004-2008); OECD (adaptation metrics, 2007-2008); NASA (mitigation and adaptation options in Ukraine, 2005-2008); NOAA (Agriculture and terrestrial carbon, 2002-2008); US National Science Foundation (Agriculture and water relations in the GISS land surface model, 2001); GEF (soil C-sequestration in Brazil, Kenya, Syria and India, 2000-2003); Italian Ministry of Environment (impacts on Mediterranean agriculture, 1998-2001); Environmental Defense Fund (carbon cycle, 1995-1998).

PUBLIC SERVICE

- Present** Founding Member, Food Climate Partnership, Columbia University
Member, Bureau of UN Committee of Experts on Environmental Economic Accounting
Member, UN Committee of Experts on Environment Statistics
Member, UNECE Steering Committee on Climate Change Statistics
Editorial Board Member, Climate Policy and Earth Systems Science Data
Member, Interdepartmental Working Group on Climate Change, FAO

Member, Interdepartmental Working Group on Statistics, FAO
Peer Reviewer for International Journals, including: *Science, Nature, Global Ch. Biol., Clim. Ch., Agr. For. Meteorol., Eur. J. Agr.*

- 2015-2022** IPCC Author, 2022 AR6 WG III Report
IPCC Lead Author, 2019 SRLCC
IPCC Lead Author, 2019 IPCC Revised 2006 Guidelines
UNFCCC, Expert Reviewer for NC, BUR submissions
UNFCCC, CDM Registration and Issuance Team and JI Accreditation Panel Member
UNFCCC, CDM Methodology and Afforestation/Reforestation Expert
- 2011-2014** Lead Author, IPCC AR5, WGIII AFOLU Ch. 11
Lead Author, IPCC, Supplementary 2006 Guidelines for AFOLU
- 2003-2008** Lead Author, IPCC Fourth Assessment Report, WG II Ch. 5.
Lead Author, IPCC Technical Paper on Water and Climate Change
- 1999-2001** Lead Author, US Climate Change National Assessment

LANGUAGES

Italian (Mother tongue)

English (Fluent)

Spanish (Working Knowledge)

Slovak and Hungarian (Beginner)

PUBLICATIONS

Over 150 publications in high impact international journals, with 60,000 citations, H-Index 68.

Google Scholar: <https://scholar.google.com/citations?user=KmQ6aakAAAAJ&hl=en>

ResearchGate: <https://www.researchgate.net/profile/Francesco-Tubiello>

PAST INTERNATIONAL CONSULTANCIES

Private Sector

<i>CEZ, sro</i> <i>Czech Republic</i>	252.5 MW Cogecalac wind farm, Romania. Implemented PDD development, assistance with determination and UNFCCC registration (Jun 2009-Jan 2011).
<i>Ferrero Spa</i>	Irrigation water Management and Afforestation with Hazelnut Plantation in Western Georgia. Implemented
<i>Italy</i>	PDD development, assistance with validation and project registration under the CarbonFix voluntary carbon standard (Oct 2009-Jan 2011).
<i>AECOM</i> <i>New Zealand</i>	Support in analysis of potential carbon finance for a large, 250 MW hydropower CDM project activity in Laos (2011)
<i>Enecore</i> <i>China</i>	Development of PDDs for eight CDM projects in China, including small hydropower, wind and fossil fuel switch (2008).

Public Sector

<i>ADB:</i>	Development of Kazakhstan's low carbon development and adaptation planning for water resource management and energy. Developed technical report on climate change impacts, adaptation and mitigation opportunities, as well as contributed to the Country Environment and Climate Change Road Map (2011).
<i>UN FAO:</i>	Report on "Green Economy, Rural Development, and UNFCCC Opportunities" a technical contribution to FAO's efforts under UNCSD Rio+20 (2011)
<i>UNDP-GEF</i>	Implementation of "Technical Feasibility Study for Biomass Supply and Demand in Georgia" for GEF application (2011).
<i>The World Bank:</i>	Development and implementation of the Agro-Zone Simulator Project, focusing on agriculture and irrigation water management issues for Latin America (2011).
<i>UN FAO:</i>	SOLAW Technical Report "Land and Water Use Options for Climate Change Adaptation and Mitigation in Agriculture," a technical contribution to the 2011 FAO "State of Land and Water." (2010)
<i>The World Bank:</i>	Support towards development of a web-based demo platform to investigate impact and adaptation options for world agricultural systems, with a focus on Latin America (2009-2010).
<i>Asian Develop. Bank:</i>	Support towards development of "Climate Change Implementation Plan for Central and West Asia". The Plan identified investment opportunities and challenges for low-carbon development paths and policies, focusing on water on power issues (2008-2009).
<i>UN FAO:</i>	Elaborated technical background papers for the "High-Level World Food Conference", focusing on climate change, rural development and food security in the context of climate change (2008).
<i>IFAD:</i>	Analysis of carbon market potential for agriculture and forestry activities for rural development (2008).
<i>The World Bank:</i>	Report on adaptation and mitigation activities in agriculture and forestry, including synergies for adaptation and mitigation for new carbon funds (2008).

OTHER PAST ACTIVITIES

1998-2003	Staff Writer , <i>Harvard University Quarterly Review on Global Change</i>
2000-01	Project Leader , <i>US National Assessment Crop Modeling Team</i> , Washington DC, USA. Coordinator , <i>Organization of Small Island States</i> , Italian Government contribution.
1995-98	Director , <i>Biosphere 2</i> , Agriculture and Water Program, Oracle, USA Lecturer "Ecosystem and Water Processes, and Climate Change." Columbia University Crop Modeling Scientist , FACE, wheat and water relations. Maricopa, USA
1995	Postdoctoral Research Scientist , NASA-Goddard Institute for Space Studies, USA
1994	Graduate Research Assistant , <i>NASA-Closed Environmental Life Support Systems</i>
1991-1993	Staff Scientist , <i>Environmental Defense Fund</i>
1992	Architecture Intern , Energy Efficiency , <i>Croxtton's Collaboratives</i> , New York USA.
1990-1992	Graduate Research Assistant , <i>New York University</i> , USA
1989-1990	Research Fellow , Italian National Research Council, Italy