

CV of René Alex GOMMES



Picture dated 2016.

**Agricultural climatologist consultant
President, International Society of Agricultural
Meteorology (May 2014 to April 2018)**

Specialist in the quantitative assessment of weather and climate impact on agriculture, with a particular interest in food security, yield and production estimates, climate change adaptation and crop insurance.

I. SUMMARY

After a degree in botany (1972) and a doctorate in bio-geochemistry (1977, University of Liege, Belgium, and EC Joint Research Centre at Ispra, Italy), I worked for the World Meteorological Organization (WMO) as a data processing specialist in a regional African crop monitoring program in Algeria (1978-79). Since then, my interest has gradually shifted to agrometeorology, after joining the UN Food and Agriculture Organization (FAO) as an agroclimatologist in a food security project in Tanzania (1980-85).

In 1986, I moved to FAO headquarters in Rome, where I have been the Coordinator of the Agrometeorology Group of FAO from 1994, then (from 2008) the Leader of the "Climate impact team" after FAO established the Climate, Energy and Land Tenure Division. In 2010, I left FAO and took up a position as a senior scientist in the FoodSec Unit at the EC Joint Research Centre at Ispra, where I have been working mainly on crop insurance in Ethiopia. Between January 2013 and June 2016, I joined Prof. Wu Bingfang's CropWatch unit at the Remote Sensing and Digital Earth Institute (RADI) at the Chinese Academy of Sciences in Beijing, as a visiting Professor. From July 2016 I have been focusing on my activities as the President of the International Society of Agricultural Meteorology and consulting work for the Chinese Academy of Sciences, the EC and the EC Joint Research Centre. I now have been a "full time retiree" for a couple of years.

My experience covers the technical/scientific, operational and institutional aspects of crop forecasting for food security, market planning and crop insurance, including international contacts and scientific collaboration, the organization of international technical meetings and training at various levels, from field observers to university.

I have travelled to, and worked in about 85 countries world-wide.

Do visit my blog: vergosum.com

II. BIODATA AND LANGUAGES

Born: 29 March 1950 in Faymonville (Province of. Liège), Belgium.
Citizenship: Belgium
Family status: Married, two sons & one step-daughter. Seven grand-daughters.

Residence Camagna Monferrato
Italy

Email r@gommes.eu

Languages: completely fluent in English, French, German (mother tongue) and Italian. Basic Dutch and Spanish. Good Esperanto.

III. EDUCATION

1962-1968: secondary school education at the Athénée Royal de Malmédy, Belgium

1968-1970: Candidature in biological sciences at the University of Liège, Belgium, with “Distinction.” Main subjects: calculus, statistics, inorganic and organic chemistry, physics, geology, mineralogy, crystallography, general biology, zoology and botany.

1970-1972: Licence in plant science State University of Liège University of Liège, with “Grande distinction.” Main subjects: plant geography, climatology, pedology, general ecology and plant ecology, plant physiology, advanced statistical methods. Thesis on the use of two submerged aquatic plants as pollution bio-indicators in fresh water bodies.

1973, Certificate in Computer Science, Conservatoire des Arts et Métiers (France).

1972-1977: Doctorate in plant ecology (phyto-geochemistry) at the Joint Research Centre of the EC at Ispra (Italy) and University of Liège, with “Plus grande distinction.” Thesis on the heavy metal eco-physiological modelling of aquatic plants in lake Maggiore (Italy).

IV. "EMPLOYMENT" RECORD

2021-Present: full-time retiree

Mostly blogging, biking and gardening.

20160701-2021: Independent consultant

The activities covered mostly invited lecturing, the development of a crop forecasting tool covering Korea DPRK for the EC Joint Research Centre (<https://ec.europa.eu/jrc/en/mars>) and the technical supervision of the quarterly CropWatch Bulletin including the preparation of several sections (<http://www.cropwatch.com.cn/html/en/index.shtml>).

201405-201804: President, INSAM (International Society of Agricultural Meteorology)

Main activities: With the assistance of the Steering Committee, develop the programme of INSAM, including technical assistance to members and coordination of the activities of the Society with the WMO Commission for Agricultural Meteorology (CagM) and the Global Federation of Agrometeorological Societies (GFAMS).

199410-201811: Lecturer (Maître de Conférences), University of Liège, Belgium

Main activities: Teach course on global food security and early warning systems.

201301-201606: Visiting professor at the Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, CropWatch unit.

Main activities: Advisor to the CropWatch unit that produces the global CropWatch crop monitoring bulletin.

201206-201212: consultant in crop-climate interactions

Main activities: Consultancies for EC/JRC on crop insurance and to FAO climate change impact project in the Philippines.

2010-201205: Senior Scientist Grant-holder, Monitoring Agricultural Resources Unit (MARS/FoodSec), European Commission Joint Research Centre, Ispra, Italy.

Main activities: Weather risk assessments and development of yield-weather indices for crop insurance in Ethiopia, under a collaborative project between UC Davis, Univ. Athens, FAO, EAE and JRC.

1994-2010: Coordinator, Agrometeorology Group, then Team leader, Climate impact Team, Climate, Energy and Tenure Division, Natural Resources Management and Environment Department, FAO/Rome

Main activities: Technical and administrative coordination of the Team (staff: 9 scientific staff and 2.5 general-service). The ratio of administrative to technical work is about 30/70.

The activities of the Team included mainly the development and implementation of methods to assess the impact of climate variability and change on crop production and on food security; technical responsibility for a number of projects dealing with climate, disaster preparedness and warning, food security, crop monitoring and forecasting. The activities cover the project cycle, i.e. identification, formulation, technical assistance and evaluation; national and regional agroclimatic studies, in collaboration with national and regional institutions; international cooperation in the area of agrometeorology and climatology (WMO, IPCC/UNFCCC, CGIAR centres etc.)

1986-93: Agroclimatologist in the FAO Remote Sensing Centre, Research and Technology Development Division, Rome

Main activities: Agrometeorological crop monitoring in western, eastern and southern Africa for food security in the ambit of the Global Information and Early Warning System on Food and Agriculture (GIEWS); project preparation and monitoring, and technical back-stopping of field experts (agrometeorologists in national Early Warning projects and agroclimatologists in Land Use Planning projects); software development and maintenance of FAO's agroclimatic data base.

1980-85: Agrometeorologist in the FAO Tanzanian Crop Forecasting and Early Warning project, Dar Es Salaam, Tanzania.

Main activities: Development of crop data collection systems for agrometeorological monitoring and forecasting purposes (crop stage and condition, adverse effects, prices...); on-the-job training of national counterparts and training of field observers; development of crop and weather data bases and models, as a part of a computerized and largely automated weather impact forecasting system.

1979-80: World Meteorological Organization (WMO) Agrometeorologist, seconded to joint FAO-WMO unit on agricultural biometeorology in FAO headquarters, Rome.

Main activity: Development of crop monitoring software (mainly for Sahelian crops).

1978-79: WMO Data processing expert for METAG project in, Oran, Algeria

Main activities: Software development for real-time analysis of Global Telecommunications System (GTS) data (including decoding) for weather impact assessment over west African and the Maghreb

**1977-78: Research assistant at the Fondation Universitaire
Luxembourgeoise**, Arlon, Belgium

Main activities: Modelling of primary production of aquatic plants in relation to weather and water chemistry

1976-77: Research assistant at the University of Liège, Belgium

Assessing the environmental impact of land consolidation.

V. ADDITIONAL INFORMATION

Member of: Association of Applied Biologists (AAB), European Society of Agronomy (ESA), International Society of Agrometeorology (INSAM) and International Society of Biometeorology (ISB).

VI. LIST OF PUBLICATIONS AND TECHNICAL REPORTS

113. Balaghi R, El Hairech T, Alaouri M, Motaouakil S, Benabdelouahab T, Mounir F, Lahlou M, Arrach R, Abderrafik M, Colmant R, Evangelisti M, Poortinga A, Kuik O, Delobel F, Gommès R, Bernardi M, Rojas O, Cumani M, Gutierrez Jm, Raes D, Mejias Moreno P, Vrieling A, Reynes F, Ward P, Grosjean P, San Martin D, Mejias P, Targetti S, Kanamaru H, Triki L, Badraoui M 2016 Climate change impact assessment using MOSAICC in Morocco. FAO Rome Italy and INRA Rabat Morocco. 249 pp. ISBN : 978-9954-0-6702-4.
https://www.academia.edu/35393347/Climate_change_impact_assessment_using_MOSAICC_in_Morocco
112. Gommès R, Wu B, Zhang N, Feng X, Zeng H, Li Z, Chen B 2016 Cropwatch agroclimatic indicators (CWAs) for weather impact assessment on global agriculture. Int. J. Biometeorol. doi:10.1007/s00484-016-1199-7
111. Gommès R, Wu B, Li Z, Zeng H 2016 Design and characterization of spatial units for monitoring global impacts of environmental factors on major crops and food security. Food and Energy Security 5(1):40–55. doi: 10.1002/fes3.73. <http://onlinelibrary.wiley.com/doi/10.1002/fes3.73/full>.
110. Li Z Y, Wu B F, Gommès R, Zhang M, Chen B 2015 Design framework for CropWatch Cloud. J Remote Sensing 19(4)578-585 (In Chinese).
109. Wu B, Gommès R, Zhang M, Zeng H, Yan N, Zou W, Zheng Y, Zhang N, Chang S, Xing Q, van der Heijden A 2015 Global Crop Monitoring: A Satellite-Based Hierarchical Approach. Remote Sens. 7, 3907-3933; doi:10.3390/rs70403907. <http://www.mdpi.com/2072-4292/7/4/3907/pdf>
108. Wu Bingfang, Zhang Miao, Zeng Hongwei, Liu Guoshui, Chang Sheng, R Gommès 2014 New indicators for global crop monitoring in CropWatch - case study in North China Plain. IOP Publishing IOP Conf. Series: Earth and Environmental Science 17, 20 pp.
http://iopscience.iop.org/1755-1315/17/1/012050/pdf/1755-1315_17_1_012050.pdf
107. Meroni M, Rembold F, Verstraete M, Gommès R, Schucknecht A, Beye G. 2014. Investigating the relationship between the inter-annual variability of satellite-derived vegetation phenology and a proxy of biomass production in the Sahel. Remote Sens. 6:5868-5884.
106. Gommès R, Kayitakire F (Editors) 2013 The challenges of index-based insurance for food security in developing countries. Luxembourg, Publications Office of the European Union, JRC77278. 276 pp. ISBN 978-92-79-27783-2. doi:10.2788/713. Downloadable from the EC publications repository as <http://bookshop.europa.eu/en/the-challenges-of-index-based-insurance-for-food-security-in-developing-countries-pbLB3112369/>.
105. Gommès R, Göbel W 2013. Beyond simple, one-station rainfall indices. In: Gommès & Kayitakire 2013 The challenges of index-based insurance for food security in developing countries. Luxembourg, Publications Office of the European Union, JRC77278. Pp 205-221. Same source as 106 above.
104. Gommès R, Kayitakire F 2013 Overview: from early warning to index insurance, In: Gommès & Kayitakire 2013 The challenges of index-based insurance for food security in developing countries. Luxembourg, Publications Office of the European Union, JRC77278. Pp 9-14. Same source as 106 above.
103. De Araujo Marinho Filho E, Korpi Salmela K, Vancutsem C, Kayitakire F, Gommès R, Kerdiles H, Rembold F, Urbano F, Meroni M. 2011. Special report on food security in the Horn of Africa - September 2011. Luxembourg (Luxembourg): Joint Research Centre of the European Commission; 2011. JRC68527.
102. Shukri, A., R. Gommès, C. McIntosh and A. Sarris. 2011. Interlinking insurance with credit to enhance agricultural productivity: a pilot application to Ethiopia. FERDI policy brief, Clermont Ferrand, 4 pp. <http://www.ferdi.fr/uploads/sfCmsContent/html/111/B23.pdf>
101. Gommès, R., F. Rembold, O.Leo. 2011. Summary Report of 3rd CRAM Workshop Crop and Rangeland Monitoring, 26-30 September 2011, Nairobi, Kenya. 14pp.
http://mars.jrc.ec.europa.eu/mars/News-Events/3rd-CRAM-Workshop/summary_cram3
100. Faures, J.M., M. Bernardi & R. Gommès, 2010. There is no such thing as an average: how farmers manage uncertainty related to climate and other factors. Water Res. Dev., 26(4):523–542.
<http://www.tandfonline.com/doi/pdf/10.1080/07900627.2010.519515>
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98. Gommès, R. & J. Grieser, 2010. Protecting small farmers. D+C, 6:237-239. Available on-line as English & German versions (<http://www.inwent.org/ez/articles/174300/index.en.shtml> and <http://www.inwent.org/ez/articles/174300/index.de.shtml>).
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- J.Lomas, J.Milford, A.Ravelo, D.Rijks, R.P.Samui, S.Walker, Wang Shili & A.Weiss. Introduction, WMO Guide to Agrometeorological Practices (GAMP), Chapter 1, 42 pp.
http://www.agrometeorology.org/files-folder/repository/gamp_chapt1.pdf
95. Gommès, R., M. Acunzo, S. Baas, M. Bernardi, S. Jost, E. Mukhala & S. Ramasamy. 2010. Communication approaches in applied agrometeorology. Pp 263-286 in Stigter, K. (Ed.). Applied Agrometeorology, Springer, 1100 pp.
 94. Glantz, M., R. Gommès & S. Ramasamy, 2009. Coping with a changing climate: considerations for adaptation and mitigation in agriculture. FAO Environment and Natural Resources Management Series N. 15, Rome, 99 pp. ftp://ext-ftp.fao.org/SD/Reserved/Agromet/glantz-gommès-ramasamy/B5_HLCPaper_09_lowres.pdf
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http://www.wcc3.org/wcc3docs/pdf/WS10_WP_capability.doc
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http://agrifish.jrc.it/marsstat/meetings/STRESA_papers/Gommès_ISPRs_2006.pdf
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 85. Chavula, A. and R. Gommès, 2006. Development of a weather yield index (wyx) for maize crop insurance in Malawi. FAO, Rome. 19 pp. Downloadable from:
ftp://ext-ftp.fao.org/SD/Reserved/Agromet/Malawi_WYX/MYZ_report.pdf.
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 83. Gommès, R., 2004. Bread – innovation, serendipity, necessity – via hotspots of environmental degradation, gruel and sustainability. European Society of Agronomy Newsletter, 25: 43-44.
 82. Bernardi, M. & R. Gommès, 2004. Sviluppo di una rete regionale sul cambiamento climatico e l'agricoltura per i paesi del bacino del Mediterraneo. Pp 145-150, in: Esposito S. & C. Epifani (Eds) CLIMAGRI - Cambiamenti Climatici e agricoltura - Risultati attività II° anno, UCEA, Roma, 152 pp. ISBN 88-901472-1-0. Downloadable from
http://www.climagri.it/pubblicazioni/n.23/Articolo_4_3.pdf.
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77. Gommès, R. 2003. Agrometeorological policy between necessity and fashion. European Society of Agronomy Newsletter, 25: 16-18.
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70. R. Gommès, 2001. What can modern agricultural meteorology do for the subsistence farmers. Paper presented at The First International Workshop on Farm Radio Broadcasting, 19-22 February, 2001, FAO, Rome.
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²This paper was originally presented at a meeting on Agricultural Meteorology in the 21st Century (Feb 1999, Accra Ghana) and "pre-published" in the WMO Bulletin under the same title (W. Baier, R. Gommès and M.V.K. Sivakumar, 1999, 48(4):374-379). There is also an Italian version (Agricoltura e meteorologia) by W. Baier, R. Gommès and M.V.K. Sivakumar in Verde Ambiente, 2000, (1):24-28.

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