

Academia Belgica, Rome,
Octobre 26-28, 2011

*THE GLOBAL LAND RESERVE:
WHERE IS IT? WHAT ARE
THE CONSTRAINTS?
A "HECTARE-BY-HECTARE"
APPROACH*

FIFTH ACADEMIA BELGICA-FRANCQUI
FOUNDATION ROME CONFERENCE
IN PARTNERSHIP WITH
SOCIETÀ GEOGRAFICA ITALIANA



Via Omero, 8 - 00197 Rome
www.academiabelgica.it

WEDNESDAY 26TH OCTOBE 2011

ACADEMIA BELGICA

09.00 - 09.15 Welcome address

- **WALTER GEERTS** on behalf of the *Academia Belgica*.
- **BARONESS JANINE DELRUELLE**, on behalf of the Francqui Foundation

09.15 - 12.30 Session I

THE CONCEPT OF LAND RESERVE

- **ERIC LAMBIN** (UCL, Belgium; Stanford University, USA)
- **HOLLY GIBBS** (University of Wisconsin, USA)

10.30-11.00: *Coffee break*

- **PARVIZ KOOHAFKAN** (FAO, Land and Water Division)
- **JOHN LATHAM** (FAO, Land and Water Division)
- **TIM SEARCHINGER** (Princeton University, USA)

12.30-14.00: *Lunch break*

14.00 - 17.30 Session II

LAND AVAILABILITY

- **GUNTHER FISCHER** (IIASA, Austria)
- **RENATO CUMANI** (FAO, Land and Water Division)

15.30-16.00: *Coffee break*

- **METTE LOYCHE WILKIE** (FAO, Forest Resource Assessment)

20.00 Supper

offered by Prof. Dr. Walter Geerts, Director of the Academia Belgica

THURSDAY 27TH OCTOBE 2011

SOCIETÀ GEOGRAFICA ITALIANA

09.00 - 09.15 Welcome address

- **FRANCO SALVATORI**, on behalf of the *Società Geografica Italiana*

09.15 - 12.30 Session III

SOCIAL AND PHYSICAL ACCESSIBILITY OF LAND

- **TOM RUDEL** (Rutgers University, USA)
- **ELIO MANZI** (Università degli Studi di Palermo)

10.30-11.00: *Coffee break*

- **FRANCA CANIGIANI** (Università degli Studi di Firenze)
- **PATRICK MEYFROIDT** (UCL, Belgium)

12.30-14.00: *Lunch break*

14.00 - 15.00 Visit

VISIT OF THE LIBRARY AND
CARTOGRAPHIC COLLECTIONS OF THE
SOCIETÀ GEOGRAFICA ITALIANA

15.00 - 18.30 Session IV

COUNTRY CASE STUDIES

- **PHILIPPE MAYAUX** (JRC, Italy): Central Africa
- **TIM SEARCHINGER** (Princeton University, USA): Africa

16.30-17.00: *Coffee break*

- **DOUG MORTON** (NASA, USA): Brazil
- **LAERTE FERREIRA** (Federal University of Goiás, Brazil): Brazil

20.00 Reception

at the Belgian Embassy in Rome
upon invitation by the Ambassador
Vincent Mertens de Wilmars

FRIDAY 28TH OCTOBRE 2011

ACADEMIA BELGICA

09.00 - 12.30 Session IV

COUNTRY CASE STUDIES (CONT)

- **RICARDO GRAU** (Universidad Nacional de Tucumán, Argentina): Argentina and other LA countries

10.30-11.00: Coffee break

- **HOLLY GIBBS** (University of Wisconsin, USA): Indonesia

12.30-14.00: Lunch break

14.00 - 17.30 Session V

CURRENT PRESSURES ON THE LAND RESERVE

15.30-16.00: Coffee break

WORKSHOP PARTICIPANTS

CONVENERS:

- ERIC LAMBIN (UCL, BELGIUM; STANFORD UNIVERSITY, USA)
- HOLLY GIBBS (UNIVERSITY OF WISCONSIN, USA)

PARTICIPANTS:

- PARVIZ KOOHAFKAN (FAO, LAND AND WATER DIVISION)
- JOHN LATHAM (FAO, LAND AND WATER DIVISION)
- FRANCA CANIGIANI (UNIVERSITÀ DEGLI STUDI DI FIRENZE)
- RENATO CUMANI (FAO, LAND AND WATER DIVISION)
- METTE LOYCHE WILKIE (FAO, FOREST RESOURCE ASSESSMENT)
- ELIO MANZI (UNIVERSITÀ DEGLI STUDI DI PALERMO)

- PHILIPPE MAYAUX (JRC, ITALY)
- PATRICK MEYFROIDT (UCL, BELGIUM)
- GUNTHER FISCHER (IIASA, AUSTRIA)
- LAERTE FERREIRA (FEDERAL UNIVERSITY OF GOIÁS, BRAZIL)
- RICARDO GRAU (UNIVERSIDAD NACIONAL DE TUCUMÁN, ARGENTINA)
- TOM RUDEL (RUTGERS UNIVERSITY, USA)
- DOUG MORTON (NASA, USA)
- TIM SEARCHINGER (PRINCETON UNIVERSITY, USA)

ORGANISED BY

UNIVERSITÉ CATHOLIQUE DE LOUVAIN

- ERIC LAMBIN (UCL, BELGIUM; STANFORD UNIVERSITY, USA)
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Land that is suitable for agricultural production is becoming a scarce resource globally, therefore increasing the competition between different land uses. Land reserve (aka spare land or land balance) is defined as productive land that is suitable for rainfed farming with low to moderate capital investments, and that is currently neither under intensive use, nor under nature protection status. Land reserve may be: (i) currently underutilized, productive land; (ii) recently abandoned cropland; (iii) grazing land that is used extensively; (iv) slightly degraded land that can be rehabilitated at a low cost; (v) idle croplands that are currently classified as croplands but unused; (vi) degraded forests or long fallows. That said, it is important to consider that this land reserve may be used as rangelands, long-term fallows, or a buffer against risks or rapid increases in demand. It may also have an ecological or social function – e.g., ecological corridor, buffer zone around parks, sacred forest.

There is a trade-off between land conversion for food and preserving natural ecosystems, forests in particular. How much forested land - distinguishing between primary, secondary or degraded forests - should be included in the land reserve is thus an open question. The land actually available for agricultural expansion will depend on future prices for agricultural products as this determines the amount of investment available. Future uses of the land reserve could be for food or biofuel production, or for intensive tree plantations. The land could be exploited by smallholders or largeholders.

A few recent studies have produced global scale, aggregate estimates of unused land with a good agroecological potential and of future demands for land uses that create pressures on the current land reserve. These top-down estimates relied on global assessments and projections based on various global statistics and models, therefore ignoring local ecological and socio-economic realities. The range of estimates is large and some figures seem unrealistic - e.g., large land reserve in RD Congo and Sudan that could be converted to agriculture in the short-term; 10 Mha of cropland abandoned every year due to land degradation.

At the Rome workshop, we will evaluate the current land reserve and the pressures affecting it based on observations and field knowledge (i.e., bottom-up approach). We will perform an observation-based assessment of land supply and, more specifically, evaluate the size and geographic distribution of the land reserve. We will also assess how this land reserve is currently used. (tentative, input requirements)?