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# The CGIAR's Third External Review

Issue: The world's largest and most influential international agricultural research network, the Consultative Group on International Agricultural Research (CGIAR), is conducting its first full systemwide review in 17 years. In May, 1998 in Brazil, a prestigious review panel led by Maurice Strong will table its recommendations for the future of the network, which launched the Green Revolution. Among the critical areas for review are the CGIAR's antiquated governance structure and membership system; the re-orientation of its research toward sustainable agriculture; addressing the problem/potential of biotechnology; and the renegotiation of CGIAR's relationships with national agricultural research networks, agribusiness, and farming communities.

Impact: Depending on whose figures are used, CGIAR's US \$304 million annual budget represents between 4-10% of the South's agricultural research funds and contributes to the training of almost every agronomist in the Third World. Although its figures are challenged by many of its critics, the CGIAR estimates that its research feeds at least 1 billion people and that its high yield research has reduced farmland requirements by as much as 40% while keeping staple food prices low for the urban poor. As much as 70% of some of the South's most important food crops are based upon CGIAR germplasm enhancement. The CG's 16 International Agricultural Research Centres (IARCs) play a formative role in research policy development throughout the South.

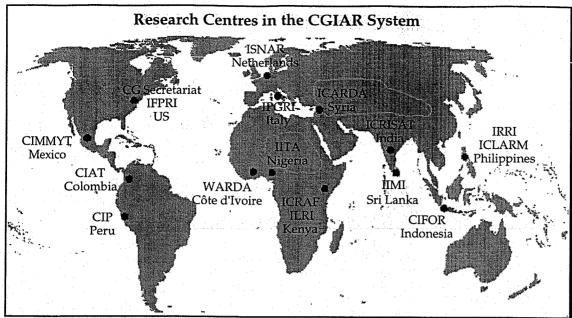
Policy Implications: Despite recent improvements, the South continues to be a marginal player in the development of CG research policies that profoundly impact national economies. The present review could correct this. Further, foreign aid flows to the CGIAR of \$300 million per annum yield an unacknowledged return (to the North) of not less than \$5 billion. The review could restructure benefit-sharing arrangements. Despite these economic benefits, the contracting aid environment, coupled with the growing strength of the private biotechnology industry, is building momentum for the privatization of some CG assets and programmes. The nine-member Review Panel includes representatives of two of the world's largest agribusinesses. To insure that the CG's External Review benefits from a wide range of innovative and diverse viewpoints, governments, farmers' organizations and other members of civil society may wish to participate actively in the review process.

# Introduction: Off to a Shaky Start?

The Consultative Group on International Agricultural Research (CGIAR) is launching its first system-wide review since 1981. A nine-member Review Panel, supported by three Specialist Panels, along with a 10-12 person "resource group", and a small secretariat has just begun a broad evaluation of the CG's current and future programme, partnerships, and governance and will make "forward-looking" recommendations on all fronts. The Panel's report will be tabled in May, 1998 in Brazil. The Panel will also meet with the CG System, and others, in Washington this October. The Panel is chaired by Maurice Strong and includes five persons from the North and four from the South. Two members represent the world's agribusinesses and one is from a CSO (Civil Society Organization). Four of the nine Review Panelists and most of the secretariat - are CG "insiders".

The Panel begins its work with three problems:

- Composition: Peculiarly, both private entrepreneurs and public environmentalists seem over-represented on the nine-member Panel. Agriculture (especially farming communities) is under-represented. The corporate influence reawakens concern that the CG will "privatize" or "sell off" some of its functions or assets. The make-up of the Panel's subsidiary bodies, however, may have some counterbalancing effect.
- 2. Timeframe: The Panel's short time frame forces a reliance on insiders and links it more to the CG's funding cycle than to a thoughtful evaluation. The panel will, however, finalize its own schedule.
- 3. Accessibility: The Review Panel is launching its own internet "home page" and has stated that it will do all it can to be accessible to a wide range of The panel will be open for constituencies. consultations in Washington the last week of October and will hold other consultations with civil society in



at least Kenya, India, Brazil, and Mexico in the early months of 1998. Without a clear commitment to travel and to meet with farming communities and NARS (National Agricultural Research Systems), however, electronic communications will narrow the range of opinions to be heard and the Panel's capacity to entertain innovative perspectives will be compromised.

So far the review panel seems oblivious to the opportunity of consulting with CSOs and national agriculture ministries during the series of FAO Regional Conferences scheduled from February through June of 1998. This would be an excellent opportunity to expose the panel to a variety of South perspectives.

These initial concerns do a disservice to an otherwise worthy process and to the concerned Panelists who have made themselves available for this difficult task. After years of crisis and uncertainty, the risk lies not in stimulating discussion but in appearing to circumvent it.

### Background: The 17-year Gap

This is the third system-wide review of the CGIAR. The first was held in 1976 following the formal creation of the Consultative Group in 1971. The second review was held five years later in 1981. The intent was to maintain a process of quinquennial system reviews in harmony with the pattern adopted for individual International Agricultural Research Centres (IARCs). However, no system review was conducted in 1986, nor in 1991, nor in 1996. An internal study, "Science and Food", initially proposed by Bo Bengsston of Sweden, was published in 1988 and does provide a general defense of the CG System with respect to programme activities. In 1994, perhaps frustrated by the System's failure to review itself, Sweden conducted its own evaluation of the CGIAR and made it available to donors and interested parties. At the time of the CG's high-level Lucerne

consultation in early 1995. CSO's wrote an open letter governments calling for a full, external, system-wide review as a prerequisite to further financial support for the financiallybeleaguered network. During the several drafts of the Lucerne Declaration, the call for a review came and went and was finally removed on the understanding that a review would be undertaken once the CG's immediate

crisis was

ended.

CSO's continued their insistence on the review and the Chair of CGIAR (Ismail Serageldin) confirmed, during International Centre's Week (ICW) October 1995, that a review would be held. Most observers anticipated that the review would be launched at ICW in October 1996 but difficulties in determining the make-up of the Review Panel forced delays until the donors met in Cairo during 26-30 May, 1997.

# Three Concerns Rough Start, Wild Ride, Happy Ending?

1. Composition: Although the Review Panel and secretariat include a number of capable and constructive individuals, its overall image is more "internal" than "external". The Panel will have difficulty perceiving the new context for international agricultural research and the requirement for new relationships and governance mechanisms. There will also be a tendency to dismiss ideas that could lead to a re-distribution of research funding or decision-making among non-CG actors. The Panel is a scaled-down "mirror image" of the existing CG governance system - with the notable exception that two of its nine members (Whitney MacMillan and Klaus Leisinger) represent agribusiness interests (Cargill and Novartis respectively). This renews concern that the major "new" idea that could emerge from the process is a move toward the privatization of some CG assets and programmes. On the other hand, members such as Maurice Strong, M.S. Swaminathan, Emil Salim, and Yolanda Kakabadse have environmentalist reputations.

The membership of the third review is especially important - not only because of the 17 year gap from the last review - but because the two previous reviews have relied on CGIAR "insiders."

The Review Panel make-up exposes a number of (sometimes surprising) weaknesses...

# TNCs and the CG System

# What Interest in International Agricultural Research?

"From genetic resistance in the Philippines, cold tolerance in the mountains of Peru, to drought tolerance in the depths of Africa, Cargill researchers, at over 50 worldwide breeding centers, search for genetics that bring improved hybrids to your farm... we believe access creates opportunity... Hybrids we develop may share genetic traits from Thailand, Chile, and the Ukraine."

--- From Cargill's Internet home pages

**CARGILL** - Mr. Whitney MacMillan is the former CEO of Cargill, Inc. and Chair *emeritus*.

1996 annual sales: \$56,000 million

largest private company in the world

world's largest grain trader

 world's largest producer of phosphate fertilizer, top beef packer, hog slaughterer, cattle producer, flour miller.

world's 10th largest seed corporation

major recipient of corporate welfare: between 1985 and 1992 Cargill received US government subsidies totaling over \$800 million through the Export Enhancement Program.

NOVARTIS - Mr. Klaus Leisinger is a former top executive of Novartis and is now Executive Director of the Novartis Foundation for Sustainable Development

1996 annual sales: US \$29,310 million

- world's largest agrochemical corporation
- world's largest pharmaceutical corporation
- world's 2nd largest seed corporation
- world's 4th largest veterinary medicine corporation

For more information on Cargill, see: Brewster Kneen's, *Invisible Giant: Cargill and its Transnational Strategies* (East Haven, CT: Pluto Press, 1995).

• While the need to involve the private sector in the Review is widely-understood, both industry reps are from major multinational firms and neither can speak for the small South-based entrepreneurial seed companies IARCs most often relate to - nor for the small North-based entrepreneurial biotech "boutiques" that have much of the biotechnology of interest to IARCs. Rather, CGIAR has opted to consult Novartis, the largest pesticides marketer in the world - a company that benefits greatly from unsustainable agriculture; and, Cargill, the largest grain-trader in the world - a company that benefits greatly from sustainable hunger. The two transnationals also rank second and tenth in world seed sales and could be

among the greatest beneficiaries of any move to privatize elements of the CGIAR.

- The Panel includes only one spokesperson currently leading a NARS (South Africa) and no spokespersons from the small and least-developed among developing countries that are presumably the CG's priority. This, particularly in view of the corporate orientation, is illogical.
- There is no bona fide and recognized "critic" of the CG or the Green Revolution on the Panel. While CGIAR should not be expected to invite those it judges to be unrealistic critics to sit on the Panel, it should have been able to identify at least one critic from science, academia, or from a farming organization.
- Although people like M.S. Swaminathan have wide experience, the impression remains that this is a group that knows less about farming than it does about the environment. From Maurice Strong to Yolanda Kakabadse there is concern that the wolf of privatization will be coated in the sheep's clothing of non-agricultural environmentalism.
- The influence of the World Bank is also a cause for concern. Although he wears many hats, Maurice Strong is currently Special Advisor to the President of the Bank. Mohammed El-Ashry, head of the Bank's Global Environmental Facility (operating under the wing of CG Chair and Bank Vice President Ismail Serageldin) will serve on the Specialist Panel for governance and Wilfred Thalwitz (a former Bank V-P and former CG Chair) has been asked to serve on the Panel's resource group. Add to this that the Bank's offices are being used for the Panel secretariat, and the prevailing impression is not encouraging.

To be fair, however, the three Specialist Panels may offer a better balance of "external" and original thinkers.

2. Time frame: The review is on a short leash. The Panel did not meet until the end of August and it is to submit its report next April giving it an effective life span of 7-8 months (and a budget of about \$1 million). The short time frame will force "external" reviewers to rely more heavily on their "internal" colleagues and the secretariat.

It is worthwhile referring to the last (1981) review whose members deplored the "...severe limits on the Team's time...". In the course of their study, that Panel interviewed 280 individuals in 13 countries and conducted two regional seminars involving 30 countries. Ten of the (then) 13 IARCs were visited during the review. The review began in mid-January, 1981 and the report was submitted in September of that year.

# External Review Panel's Draft Schedule

		1997
May 26-30	Cairo	Initial interaction with the CGIAR
August 25-27	Washington	First Review Panel meeting
August-September		First Specialist Panel meetings
October 27-31	Washington	Second Panel Meeting and Interaction with the
		CGIAR
		1998
November 1997 - Feb	o. 1998	Specialist Panel Meetings
February 9-13	Addis Ababa	FAO 20th Regional Conference for Africa
March 1998		Third Panel Meeting
March 21-25	Damascus	FAO 24th Regional Conference for the Near East
April 1998		Report Submitted to the CGIAR
April 20-24	Rangoon	FAO 24th Regional Conference for Asia and Pacific
May 25-29	Tallinn	FAO 21st Regional Conference for Europe
May 25-29	Brazil	Report Presented to the CGIAR
June 16-20	Jamaica	FAO 25th Regional Conference for Latin American
		and the Caribbean

While this is approximately the same time period as is available for the third review, the earlier reviews had only five years to cover while this one has 17 years and a major institutional/financial crisis to span. There are rumours that the review panel feels the need to extend its timetable by at least another three months. This remains unconfirmed however.

3. Process: It is urgent that the Review Panel make clear its intent to consult with a wide range of parties farming including communities and organizations as well as other CSOs - not only in Washington but especially in Africa, Asia, and Latin America. Given that the Panel includes two members from transnational enterprises, there is a particular need to balance this unfortunate bias by listening carefully to other views. While some of the imbalance can be redressed through the Specialist Panel memberships, there is no substitute for direct discussions in the field.

If these problems are not resolved: The described limitations could lead to a highly-generalized report that will do little more than beatify the status quo. The final report will press for "environmentallysustainable agricultural development research", greater cooperation with civil society (by which it will mean CSOs, communities, and industry), and urge the further development of the Global Forum and its regional counterparts as the CG's consultative "pseudo-governance" mechanism. The report will also throw its weight behind a greater emphasis on new biotechnologies. This will allow it to also press for more linkages to industry. The language on policy issues (genetic resources and patenting) will be soft, full of concern, and accommodating to the private sector.

Supporting this is news that the CGIAR, in conjunction with the review, has established an additional biotechnology panel with the heavy participation of industry. This new panel is intended

to table its report along with the review report and is bound to be highly favorable to industry.

Indeed, the major beneficiary of the report may well be the private sector that wants to utilize IARC research assets and networks to extend their markets. In sum, the Panel will offer up a broad endorsement of existing trends and strategies while being careful to make sufficiently concerned utterances about the role of the South, civil society, and sustainability to placate the liberal end of the donor spectrum - if not CSOs. Presented to the donors in May next year, the review endorsement will fit snugly into the funding cycle allowing CG supporters to return to their capitals and request that funding levels be maintained and/or increased.

If the process continues to evolve: Alternatively, the Panel could produce specific and creative new ideas and recommendations on governance, consultative processes, research goal formulation and monitoring, financial support for NARS and other elements of the emerging global research system, and mechanisms for encouraging and monitoring relations with other actors. Properly supported, the Panel could break new ground and invigorate a healthy and long-overdue environment of constructive dialogue around the world.

Reviewing the Reviewers  Comparison of Panel and IARC Trustee Composition							
<u>Category</u>	<u>Panel</u>	<u>Trustees</u>					
North	56%	56%					
South	44%	44%					
AgreeCulture*	33%	25%					
Women	22%	20%					

# Contact Information for the CGIAR System Review Panel

### Panel Members

Mr. Maurice F. Strong

Panel Chair, Senior Adviser to the President The World Bank Room D11-041 1818 H Street N.W. Washington DC 20433

US

Fax: (World Bank): 202 522-1680 Tel (World Bank) 202 473 6556

Tel (UN) Fax (UN)

212 963 4035 212 963 8845

Mr. Bruce Alberts

President, National Academy of Sciences 2101 Constitution Avenue N.W. Washington DC 20418 US

Fax: 202 334 1647 Tel: 202 334 2100

E-mail: balberts@nas.edu

Mr. Whitney MacMillan

P.O. Box 2187 Loop Station Minneapolis MN 55402 US

Fax: 612 359 4499 Tel: 612 359 4480

Mr. Kenzo Hemmi

c/o Japan Center for International Exchange 9-17, Minami-Azabu 4 Chome Minato-Ku Tokyo Japan

Fax: 81 45 443 7580 Tel: 81 45 922 5511

Ms. Bongiwe Njobe-Mbuli

Director General,
Department of Agriculture
Ministry of Agriculture and Land
Affairs
Private Bag X 250
Pretoria 0001

**South Africa**Fax: 27 12 218 558
Tel 27 12 319 6517

# The CG Review Online

Official CGIAR info page http://cgreview.worldbank.org/

<u>Unofficial RAFI CG Review Page</u> http://cgiar.rafi.org

Ms. Yolanda Kakabadse

Executive President
Fundación Futuro
Latinoamericano
Av. Amazonas 3741 y Corea of
52, piso 5
Casilla 17-17-558
Quito
Ecuador

Fax: 593 2 462 204 Tel: 593 2 435 521

Mr. Emil Salim

Professor of Economics (former Minister of Environment) Taman Patra, XIV Block MXIII No. 10-11 Jakarta 12950

Jakarta 12950 Indonesia

Fax: 62 21 522 8033

Mr. Klaus Leisinger

Executive Director Novartis Foundation CH-4002 Basel

Switzerland

Fax: 41 61 696 2239 Tel: 41 61 696 6766

Mr. M.S. Swaminathan

M.S. Swaminathan Research Foundation 3rd Cross St. Taramani Institutional Area Madras 600 113 India

Fax: 91 44 235 1319 Tel: 91 44 235 1229

## Secretariat Staff

Dr. Bo Bengsston

Secretary,
Governance and Finance Panel
Dept. Of Crop Production
Science
Swedish University of
Agricultural Sciences
Sweden

Fax: 46 413-25476 Tel: 46 18-672615

E-mail: Bo.Bengtsson@vo.slu.se

Mr. Michel Griffon

Secretary, Strategy and Structure Panel Director, URPA

France

Fax: 33 143 947311 Tel: 33 143 947 313 E-mail: Griffon@cirad.fr

Dr. Mahendra M. Shah Executive Secretary United Kingdom Tel: 44-181-907-8695

Fax: 44 181 909-2825

Dr. Vo-Tong Xuan
Secretary, Science Panel
Vice Rector
University of Cantho
Vietnam

Fax: 84 71 838474/831270 Tel: 84 71 838262/830040 E-Mail: v.xuan@cgnet.com

# Addresses for Correspondence

CGIAR Review Panel
Executive Secretary
Room H2135
CGIAR
1818 H St. N.W.
Washington DC 20433
US

tel: 202-473-0551 fax: 202-522-2410

e-mail: cgreview@aol.com

## **Notes on the Review Process**

"If I were you, I wouldn't start from here," said the farmer to the salesman, scratching her head.

RAFI's information is based upon conversations with a number of individuals who attended the Cairo Midterm Meeting and on CGIAR Document No: MTM/97/12 dated May 19, 1997 entitled "Status Report on the CGIAR System Review." The draft terms of reference, including a tentative schedule were discussed and modified by the Review Panel at its first meeting on August 25-27, 1997 in Washington, DC. Briefing papers for the Panel were to be ready by July 15,1997. The World Bank has provided office space for the Review Secretariat. Maurice Strong's Executive Assistant is based at the World Bank Office in New York.

## Notes on Panel Members More "Steak-eaters" than Stakeholders

After a 17 year hiatus, it is inevitable that the review process - and the reviewers themselves - are as much of a "hot topic" as the subject of the review: CGIAR. For this reason, RAFI is offering a brief sketch of each of the nine Panel members.

STEAK-EATERS (five from the financial donors group): After the World Bank, the USA and Japan rank first and second as government donors to CG funding. Germany and Canada are never far behind.

- or with agriculture. Alberts is a noted biochemist and molecular biologist and can be expected to pursue his enthusiasm for new biotechnologies within the Panel.

Kenzo Hemmi (Japan): Since Japan is a leading CG funder, there is an unwritten rule that it must have someone on everything. Hemmi, however, comes with strong credentials as an agricultural economist and an expert on agricultural trade. He has authored at least two books on the politics of food trade and Japan-US agri-trade relations. A retired academic, he continues to relate to the Japanese Centre for International Exchange. Hemmi chaired the International Rice Research Institute's (IRRI) board in the mid-80s when Swaminathan was Director-General and the two - along with Emil Salim - are presumed to be old friends.

Klaus Leisinger (Germany): Well-known to CSOs in Europe, Leisinger managed Ciba-Geigy's pharmaceutical operations in East Africa before taking over the company's public relations portfolio in Basel. In recent years he has functioned as Ciba-Geigy's (now Novartis's) favorite "independent academic" and is often called upon to defend industry and the Green Revolution. Leisinger presently heads the Novartis Foundation which (we will now often be told) is a totally-independent arms-length institution. Leisinger has written extensively opposing debt forgiveness and advocating biotechnology. Novartis has recently had staff on two IARC boards and has engaged in some ioint work with different IARCs in the system

	Panel "Balance" on Four Leading Issues						
Inside/ Outside	Produce/ Preserve	Public/ Private	Co-Tech/ Hi-Tech				
CG Non <b>45 55</b>	Agric. Environ. 50 50	NARS Industry 35 65	Farmers 35	Biotec <b>65</b>			

Maurice Strong, Chair (Canada): Secretary-General for both the Stockholm Conference and the Earth Summit, Strong was also the founding Director General of UNEP and the founding President of Canada's CIDA (foreign aid programme). The son of a farm worker and raised in rural Canada, Strong's professional background is as an entrepreneur and business executive with Power Corporation. He also served a stint as the Chair of Ontario Hydro (North America's largest power utility). Most recently, he has acted as a special advisor to the UN Secretary-General on restructuring and to the President of the World Bank. Although he has farmed in Australia and has a ranch in Colorado, Strong's connections to agriculture are hardly intimate. Less known is that Maurice Strong is a Founding Father of the CGIAR and attended its first organizational meeting.

Bruce Alberts, Chair, Science Specialist Panel (US): Currently President of the US National Academy of Sciences (and an NAS member since 1981), he is not known to have any past connections with the CGIAR

Whitney MacMillan (US): MacMillan ranks in the Forbes 400 richest Americans with a personal wealth estimated at \$975 million. (His capacity to solve the CG's poverty alleviation mandate, therefore, is uncontested!) Between 1977 and 1995, he was CEO of the world's largest privately-held agribusiness Cargill, Inc. He continues to be Chair emeritus of his family concern. Cargill is the world's largest graintrading enterprise and is estimated to control no less than a quarter of the global grain trade - rendering it a major beneficiary of food aid exports. Cargill also ranks among the top ten global seed companies. MacMillan has written and spoken extensively about world food issues and about the role of the private sector in food security. He has also participated in World Bank conferences on these topics. In 1982 (on the eve of the African famine) MacMillan made a speech in Minnesota discussing the corporate role in food security, "...the world today can respond faster and at less cost to provide emergency famine relief because of commercial export growth. The severity of famine has declined as a result." During the

famine, Cargill received USDA contracts to export concessionary cereals to the stricken countries. RAFI has no information on MacMillan's past links to the CGIAR.

STAKEHOLDERS (four from the germplasm donors group) - Of the four, one is from a non-agricultural CSO representing Latin America's interests, one is from a NARS representing Africa's interests; and two are very experienced hands from Asia.

M.S. Swaminathan, Chair, Strategy & Structure Specialist Panel (India): Former Science Advisor to the Prime Minister of India, former President of IUCN, former Independent Chair of the FAO Council, Swaminathan - like Strong - has been everywhere and done everything. He was also Director General of IRRI and on the board of the International Irrigation Management Institute (IIMI). Most recently, Swaminathan has chaired a CG committee on policy. He was also a member of the last (1981) review team.

Emil Salim, Chair, Governance & Finance Specialist Panel (Indonesia): Former Minister of the Environment for Indonesia and Chair of the UNEP Governing Council, Salim earned a reputation for fighting pesticides and supporting environmental action which he has continued through his work on the board of the International Institute for Sustainable Development (IISD). Currently a Professor of Economics in Jakarta, Salim is an old colleague of Swaminathan and Strong.

Bongiwe Njobe-Mbuli (South Africa): As the relatively new Director-General of the South African Department of Agriculture, Njobe-Mbuli is well-respected as both strong and capable with good political instincts. Prior to her present position, she was a professor in the agricultural faculty of Pretoria University. One of the two women on the nine-member Panel she will not only have to represent Africa and NARS but also the interests of women farmers. She has no known links to CGIAR although South Africa joined the CG donors group in 1996 - presumably following a favorable evaluation of the System.

Yolanda Kakabadse (Ecuador): Well-known as a long-standing member of the environmental movement in Ecuador, Kakabadse once led a CSO that coordinated PAN (Pesticide Action Network) in Latin America. She now heads another respected CSO addressing the future of Latin America. She has been publicly critical of the military in her own country and throughout the region. She is currently on the CGIAR's NGO Committee but she is not known to have any personal linkage to agriculture and she is well-connected not with agricultural Kakabadse is the sole Latin American. She was elected President of IUCN in October, 1996 - a post once held by Swaminathan.

#### Secretariat

Mahendra M. Shah, Executive Secretary (Kenya/UK): With long experience in the UN System and close cooperation with Strong - first, when Strong

coordinated the UN's emergency programme in Africa in the mid-eighties, and then at the UN Conference on Environment and Development (UNCED) - Shah also worked with FAO in developing its agro-ecological strategy. A skilled diplomat and organizer, Shah will coordinate the review process and papers.

Bo Bengsston, Secretary, Governance & Finance Specialist Panel (Sweden): The closest thing the group has to a renegade, Bengsston is also an "insider" who has chaired the CG's Center for International Forestry Research, sat on many boards including the International Centre for Research in Agroforestry (ICRAF), and has led the Swedish delegation to the CG for many years.

Michel Griffon, Secretary, Strategy & Structure Specialist Panel (France): Known as an independent thinker, Griffon now heads URPA in France's International Centre of Agronomic Research for Development (CIRAD). He will have to work hard to keep up with Specialist Panel Chair, M.S. Swaminathan - the perennial "insider" and strategist.

Vo-Tong Xuan, Secretary, Science Specialist Panel (Vietnam): The only South member of the Secretariat, Vo-Tong is well-regarded and well-known to Asian CSO's for his innovative work on community germplasm conservation. He (with Bo Bengsston) is also a member of the Crucible Group (informal thinktank on intellectual property issues). Xuan has been on the board of the International Potato Center (CIP).

Litmus Tests: Crudely speaking, the Review Panel can be given a litmus test on three critical issues: (1) orientation toward agriculture environment - do individuals approach agricultural research from the traditional environmentalist or the traditional producer background? (2) Do they look at issues from the point of view of national research systems in the public sector or from the angle of the private sector? (3) Is their bias toward hi-tech (biotechnology) solutions or toward "co-tech" (cooperative farmer-based research) approaches? Some, like M.S. Swaminathan, could be said to have a foot in every camp. For most, it is too early to apply the test. The table above offers an early assessment.

# Draft Terms of Reference (as described in the CGIAR document)

The task of the Review Panel is to assess the CGIAR's effectiveness in fulfilling its overall mission of contributing, through its research, to promoting sustainable agriculture for food security in developing countries, and to make recommendations for improvements. The Panel is asked to conduct its examination with a broad. forward-looking perspective, focusing, in particular, on the future role of the CGIAR system within the rapidly changing global scientific, communications, and institutional settings and arrangements. It should pay particular attention to the evolving capacities of NARS in developing countries, NGOs, and the private sector; the comparative advantages of various actors; the

organization and management of research; and the need for strengthening research partnerships.

The Panel is expected to conduct detailed examinations of at least the following three subjects:

- Science. Key issues include: The role and positioning of the CGIAR within the global agricultural research system; identifying the most important scientific challenges the CGIAR should aim to address in the future; and appropriateness of the type and quality of science practiced at the CGIAR centers.
- 2. Priorities, Strategies, and Structure. Key issues Important gaps or redundancies in the CGIAR's current coverage of scientific activities; appropriateness of CGIAR policies on key areas such as genetic resources and intellectual property rights; and structure of the center system and efficiencies that could be achieved by better deploying existing resources, taking into account opportunities for new partnerships.
- 3. Governance and Finance. Key issues include: The CGIAR's own governance arrangements, including the system-wide committees and units and their roles; effectiveness of the CGIAR's internal decision processes for priority setting, resource allocation, and evaluation; and, arrangements for financing the activities of the centers.

The Review would be conducted by a Panel of independent, strategic thinkers of acknowledged stature who are sensitive to issues of development and the role of scientific research can play in addressing The Review would be made up of three components:

- · a Review Panel of nine members, including the Chair:
- three Specialist Panels of four members each; and,
- a four-person Secretariat (based in Washington, DC).

The Specialist Panels would focus on the three key areas of the Review noted above. Three of the Review Panel members would serve as Chairs of the Specialist Panels. The Specialist Panels would each be supported by a member of the Review Secretariat. A member of the Secretariat would serve as Secretary to the System Review and coordinate the work of the Secretariat.

In addition to suggested briefing papers, other groups within the global agricultural research system are encouraged to submit notes stating their views on the major questions being addressed by the Panel (which are summarized in the terms of reference).

"The inherent vitality of the System is wellillustrated by its willingness to subject itself to review, based upon independent study by an external panel."

- Second Review of the CGIAR (1981), p. 22

#### Conclusion

CGIAR has long suffered from the assumption that it can isolate the agricultural research process (including policy and strategy formulation) in a governance environment removed from the wider agricultural and rural development environment. Research policy and goals must be negotiated where research products will have impact. Although the Review has just begun, there nevertheless appears to be a similar isolationist tendency within the Panel. Thus, despite the shortness of time and financial limitations, the Panel has not considered taking advantage of FAO's five regional agricultural conferences in the first half of 1998 to convene consultations that would allow them to hear from the South's agricultural ministries and farming organisations. This is an unfortunate oversight rendered no less acceptable because it has also not occurred to FAO to offer its regional encounters as review fora.

RAFI will provide future updates and analysis on the progress of the CGIAR's Third External Review.

# Preliminary List of Specialist Panels

#### Science

B. Alberts (Chair, US), J. McGlade (UK), J. Schell (Belgium), J. Vargas (Brazil), R. Wang (China), Vo-Tong Xuan (Vietnam)\*\*

Strategy & Structure

M. Swaminathan (Chair, India), M. Buvinic (Chile), G. Castillo (Philippines), B. Chevassusau-Louis (France), G. Conway (UK), M. Griffon (France) \*\*

## Governance & Finance

E. Salim (Chair, Indonesia), G. Blight (Australia), M. El-Ashry (Egypt), E. Penalosa (Colombia), C. Abella\* (Philippines), B. Bengtsson (Sweden) \*\*

Non-Deciding Resource Group\*

A. Cordeiro (Brazil), C. Dorm-Azabu (Ghana), T. Egziabher (Ethiopia), J. Farrington (UK), N. Heyzer (Singapore), P. Mooney (Canada), M. Opole (Kenya), P. Rossett (US), R. Singh (India), S. Spangler (US), W. Thalwitz (Germany), T. Urban (US), S. Unako (Thailand), P. With (Denmark) E.Witoelar/S. Sastrapadia (Indonesia), M. Shah (UK)\*\*

\* unconfirmed

\*\* indicates a member of the Secretariat

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http://cgiar.rafi.org

## **NEWS AND UPDATES**

# ANIMAL PATENTING ACCELERATES IN US

The hesitancy with which the US Patent and Trademark Office (PTO) began granting animal patents in 1988 has all but disappeared, and today the practice is accelerating dramatically (see chart). The recent trend is fueled by a backlog of patent applications, rapid advances in biotechnologies and the promise of commercial markets for transgenic animals and the therapeutic proteins they produce. Based on the US trend, the European Union can expect hundreds of backlogged animal patents to begin issuing if the European Patent Directive is adopted - as expected - by the European Parliament's Council of Ministers later this year.

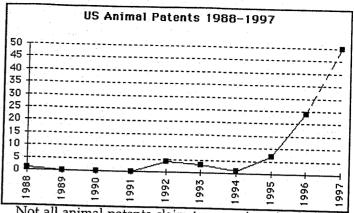
A total of 69 animal patents have issued in the US as of July 22, 1997. The number of animal patents granted by the PTO during the first 7 months of 1997 has already exceeded the total number of animal patents issued in 1996 (see chart). Based on projections from the first half of this year, RAFI predicts that the number of animal patents issued in 1997 will more than double the previous years' total. The animal patent stampede is not likely to slow down anytime soon. According to the US PTO, over 355 animal patent applications are now being considered by patent examiners.

The majority of animal patents issued in the US cover mice or rats that have been genetically altered to mimic human conditions or diseases. The animal "models" can then be used to study a human disease, or experiment with possible therapies.

A review of animal patents illustrates that the lines between animal genomes and human genomes are blurring. Patented animal models with human ailments/conditions include, for example:

- a guinea pig with asthma;
- transgenic animal "model" for human cutaneous melanoma;
- rat or mouse exhibiting behaviors associated with human schizophrenia;
- transgenic mouse carrying a non-infectious HIV genome;
- nude mouse "model" for human neoplastic disease;
- transgenic animal "model" for neurodegenerative disease.

While most patents cover rodents, one lower invertebrate - a nematode (round worm) - has been patented. Patents have also issued on 2 avian species, 1 rabbit, 1 sheep, 1 guinea pig, and 1 fish. With recent advances in the creation of transgenic sheep using cloning technology, more patents can be expected on livestock (sheep, cows and pigs) that produce human proteins or organs for human transplant.



Not all animal patents claim transgenic animals. Some patents do not specify what type of animal or mammal is covered, leaving the door open to broad claims covering many species - including humans.

As of July 22, 1997 not a single animal patent has issued to an individual. Over 25% of all animal patents issued are held by three companies:

- Genpharm International (recently acquired by Medarex, Inc., a company that has collaborations with Novartis and Merck KGaA)
- Systemix, Inc. (a wholly owned subsidiary of Novartis),
- Ontario Cancer Institute (a hospital-based Canadian research institute).

Other major pharmaceutical/biopharmaceutical companies that hold animal patents include Bristol Myers Squibb, Novo Nordisk, Eli Lilly & Co., Takeda Chemical, Nippon Zoki Pharmaceutical, and Amgen, Inc.

Cautionary words for farmers and civil society organizations in the EU: Although there have been several legislative attempts in the US to curtail the impact of animal patents on small farmers (to exempt farmers from having to pay royalties on the offspring of patented livestock), none have passed. Ultimately the patenting of animals enables the life industry to stake greater corporate control over agriculture and a rapidly diminishing livestock gene pool.

(1997 figure is projected based on the first seven months of the year. Special thanks to RAFI Intern, Kimberly Wilson, who conducted research for this report.)

## QUINOA PATENT UPDATE

News of the US and Australian patents on the Apelawa variety of quinoa held by two Colorado State University professors (see *RAFI Communique* December 1996) has led to demands from Bolivian quinoa growers that the patents be dropped. In June, two representatives from Bolivia's National Association of Quinoa Producers (*Asociación Nacional de Productores de Quinoa* - ANAPQUI) traveled to New York to protest the patent at the special session of the UN General Assembly held to review the Agenda 21 agreement made five years ago in Rio de Janeiro.

Luis Oscar Mamani Ramos, President of ANAPQUI, and Gladys Ayaviri, a quinoa grower, presented their case against the patent to government delegates and press in New York, and made clear that the livelihoods of thousands of small quinoa farmers in Bolivia were threatened by the encroachment of the patent system. The patent was denounced from the podium of the General Assembly in a rare intervention by indigenous peoples. Quinoa was domesticated in the Andes where it has been adapted by small farmers to a wide variety of climates and its genetic diversity has been maintained and developed for thousands of years.

Within Bolivia the patent has been widely denounced by civil society groups. With support from Bolivian quinoa breeding experts and ANAPQUI, CSOs including Ecologia Andina, ETP-CESA, FOBOMADE, IBIS, IBTEN, and KURMI have formed a Commission to work together on the patent and maintain contact with the Bolivian government on the subject.

One of the "inventors" of the Apelawa quinoa patent, Dr. Sarah Ward, insists that her patent, which explicitly claims male sterile Apelawa quinoa seed (Apelawa is a farmers' variety), does not threaten Bolivian and other Andean quinoa growers because the sterility is most likely the result of a cross between the Apelawa variety and a weedy relative in North America. "This patent applies to a cytoplasm which has never been present in quinoa grown in the Andes, but which has been acquired by quinoa plants grown in US farmers' fields as a result of extended exposure to a US weed species not found in South America," writes Ward. The patent makes no mention of this origin of the germplasm. Ward also states that "no

commercial potential" exists for the patent; but paradoxically refuses to abandon it and has declared her intention to keep the patent and pay over US \$1000 to maintain its validity through October, 2001.

A wide variety of information about the patent can be found in a special section of RAFI's internet site at "http://www.rafi.ca/quinoa/". The broad coalition of farmers' organizations and NGOs currently supporting a halt to the patenting of quinoa will continue its work. Updates about the patent will appear in future editions of RAFI Communique.

## New Publication in Spanish

## Confinamientos de la Razon

Monopolios Intelectuales

Material de Apoyo sobre Conocimiento Local,
Biodiversidad, y Propiedad Intelectual

This Spanish version of the recent study "Enclosures of the Mind" was prepared by RAFI, with support from Canada's IDRC, as part of its commitment to the Community Biodiversity Development and Conservation Programme (CBDC). An electronic version is available on the internet via RAFI's Spanish publications home page located at http://www.rafi.ca/espanol/ or a paper edition may be requested from the CBDC Coordinating Office at the following address:

CBDC Coordinación C.E.T. Casilla 200 Temuco, CHILE e-mail: cettco@entelchile.net



Rural Advancement Foundation International P.O. Box 640 Pittsboro NC 27312 USA

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