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B U L L E T I N

*The focus of this issue of the South Bulletin is on agriculture.
The next issue will focus on intellectual property rights.*

BOUTROS BOUTROS-GHALI NEW CHAIRMAN OF SOUTH CENTRE

Following the resignation due to health reasons of Dr. Gamani Corea of Sri Lanka, the incumbent Chairman of the Board of the South Centre, Dr. Boutros Boutros-Ghali of Egypt was elected as the new Chairman by the Council of Representatives, which consists of representatives

of the 46 developing country Member States of the Centre. The election, by acclamation, took place at the fourth meeting of the Council held in Geneva on 16 May 2003. The following is a snapshot of the latest Executive Board structure of the South Centre:

COUNCIL OF REPRESENTATIVES

Convenor	Luis Fernando Jaramillo	Colombia
Vice-Convenor	Abdul S. Minty	South Africa

THE BOARD OF THE SOUTH CENTRE

Chairperson	Boutros Boutros-Ghali	Egypt
Members		
<i>Africa</i>	Chief Emeka Anyaoku (Vice-Chairperson)	Nigeria
	Salim Ahmed Salim	Tanzania
	Idriss Jazairy	Algeria
<i>Asia</i>	HRH Prince El Hassan Bin Talal	Jordan
	Ma Yuzhen	China
	Ashok Parthasarathi	India
<i>Latin America & the Caribbean</i>	Cristovam Buarque	Brazil
	Norman Girvan	Jamaica
	José Antonio Ocampo	Colombia

For more information on the members, please consult the South Centre website: www.southcentre.org

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THE SOUTH CENTRE MUST BE STRENGTHENED - PRESIDENT MKAPA

The President of the United Republic of Tanzania, Benjamin William Mkapa, recently called on all developing country governments to strengthen the South Centre – the intergovernmental organisation of the South. He was the guest of honour at the fourth meeting of the Council of Representatives of the South Centre, held in Geneva on 16 May 2003. Following are extracts from his address.

“Like everyone else I am deeply sorry to hear that ill health has forced our Chairperson, Mr. Gamani Corea, to resign. We are eternally grateful for the great work he has done for countries of the South, both in the context of the South Commission as well as the South Centre. Our prayers are with him, and we wish him a quick recovery.

I have always considered the decision to establish the South Centre - as a *sui generis* collective think-tank of developing countries - a correct strategy for the weak in a world of global institutions, processes and benefits that are manifestly skewed in favour of the strong. In the face of this reality, the weak must - at the very least - strive to be more coherent, united, and capable of making their reasoned collective case heard in an increasingly integrated and interdependent world.

A good topical example where such coordination, coherence and unity is needed - and which the Permanent Representatives in Geneva are familiar with - is on how best we can work together to get the Doha Development Agenda back on track. The South Centre could give us the “software” with which to work towards such an approach.

Not everyone in our common planet would like that to happen - to have a coordinated, coherent, and united position of the countries of the South on global issues of mutual interest. That is why we must strive to give the South Centre the practical support to survive and thrive at the highest political level. That also is why we must make full

use of the capabilities of the South Centre within its mandate and competence.

It was for this reason that I had looked forward to participating in the Third Meeting of the Council of Representatives in New York last year (31 January - 1 February 2003). I regret that conflicting demands on my diary made it impossible for me to do so. The same demands prevented me from attending the High Policy Forum in Amman, Jordan.

And speaking of Jordan, let me again thank His Royal Highness, Prince El Hassan bin Talal, for agreeing to bring into the Board his tremendous wealth of wisdom, political stature, broad knowledge, and global leadership qualities that should serve the South Centre so very well.

Tanzania has more than a passing interest in the South Centre, as originally conceived. For, in addition to the work it has done -- and continues to do -- for the countries of the South, and its tremendous potential in that regard for the future, the Centre is part of the legacy of Mwalimu Julius K. Nyerere, the Founding President of our country. It is, therefore, for us in Tanzania a matter of honour and duty to do all we can to protect and project that legacy.

I am pleased that at the Third Meeting of the Council of Representatives you appointed to the Board my compatriot, Dr. Salim Ahmed Salim -- in his individual capacity as usual -- but who also happens to be Chairperson of the Mwalimu Nyerere Foundation. I am sure he will live up to your expectations of him.

For, our sentimentality towards the South Centre notwithstanding, weak countries of the South need the Centre in a very practical way as they head for the uncharted and unfamiliar international waters ahead. I am here in Geneva also to attend the Fifth Meeting of the World Commission on the Social Dimension of Globalisation. In my work with the Commission I have found the occasional and working papers commissioned by the South Centre under the Trade-Related Agenda, Development and Equity (T.R.A.D.E.) Project; the Intellectual Property Rights Project; the Trade in Services Project; and the Trade in Agriculture Project, both insightful and useful.

I, therefore, make a firm commitment to remain engaged in, and to keep abreast of, the interests and work of the South Centre, and to give it -- as always -- both direct and indirect support. For, I believe that a successful future for the Centre, amidst various pressures regionally and internationally, can only be assured if both its work and survival receive the necessary support of member countries at the highest political level.

If we do not support it at that level, it will fail to deliver to its full potential, and hence fall short of our expectations of it. And if it does not have the chance to prove its worth, pressures will begin to mount that it is no longer relevant. But many of us know that the Centre is relevant and worth every penny we expend on it. So, the real issue is not one of relevance. The real issue is that we have not yet given the South Centre sufficient resources to serve us better.

Let me also commend the Council of Representatives for painstakingly assembling a Board that comprises among the best the countries of the South can offer. They are people who have distinguished themselves in terms of excellence, broad experience and commitment. They are well equipped to provide visionary leadership and political stature sufficient to steer the Centre in the direction we all want. In other words, with our full support, they can take us forward, not backwards.

We all come from the South. But some of us are stronger politically, economically and militarily, than others. They have a special responsibility to the rest of us. I plead that our co-operation should not replicate the negative aspects of North-South relations we have set out to redress. We all face serious challenges -- to various degrees -- as developing countries. Acting as a group, we can promote our collective interests and objectives. The problem is that acting as a group is also a formidable challenge in its own right! We must not pretend those challenges do not exist. We must acknowledge them, address them, and ultimately rise above them.

The South Centre has passed through a difficult period since Mwalimu's death. There is enough blame to be shared around. Some problems arose out of the confusion about the Centre's capabilities and institutional roles; others out of different expectations from the institution. There were also very serious problems -- which remain with us -- on account of financial problems. The Centre may not be perfect. We did not expect it to be. But we need it, and have now to work together to improve it. As the ancient Chinese sage and philosopher, Confucius, said: "Better a diamond with a flaw than a pebble without".

The experience gained in the process of trying to polish that diamond has proven very useful. We have been forced to deal head-on with the weaknesses and potential problems of the Centre. The outcome of the last Council Meeting in New York has helped to begin establishing institutional and procedural safeguards and provisions that will help strengthen the institution, without undermining its intellectual autonomy. We can make the Centre more effective and transparent without going against the grain of our initial intentions as expressed in the Inter-Governmental Agreement.

The Functions and Purpose of the South Centre

The objectives and functions of the South Centre, as presently constituted, remain valid -- if not more valid today -- as when we established it:

- First, in a world of double standards and unilateralism, a world in which the asymmetries of power are becoming more pronounced, the countries of the South need more practical solidarity, not less;
- Secondly, we need to help each other build capacity to understand and negotiate, and to foster the convergence of views and approaches on global economic, political and strategic issues. We need the South Centre to provide us all with focussed policy analyses, and to be our collective bank for ideas and action-oriented proposals; and
- Thirdly, we still need to contribute to mutual understanding and co-operation between the North and the South based on equity and justice for all.

You will forgive me for drawing inspiration from the Founder Chairman. At the opening ceremony of the First Meeting of the Council of Representatives (in September 1995) Mwalimu Julius K. Nyerere emphasised some of these points. He said:

"The new, Intergovernmental South Centre...is NOT the Secretariat of the South which was so strongly recommended in the South Commission's final Report. ...The South Centre is a small 'Think Tank' of the South. Its work is based on the belief that the countries of the South can cooperate, or act together, more effectively when they have access to greater and shared knowledge and understanding of major international questions and of the implications of these questions for the freedom and development of our countries."

And, talking of international North-South negotiations on economic and social issues, Mwalimu stressed that the South Centre is not an executive body of any kind. He said that:

"...it will objectively analyse international or regional issues relevant to people-centred development of the South and its peoples. As appropriate, it will make recommendations concerning possible action by the South. But it will be for the governments and peoples to determine what action they wish to take and can take."

Yet, Mwalimu Julius K. Nyerere was also a practiced leader of a South country. From experience of government, but also from what other South leaders in a worse position than himself sometimes said to him, his speech pointed to another positive function which the Centre would be able to fulfil:

"All governments sometimes find it helpful to have someone who

can say what they would like to say, but from whose words they can, under pressure, disassociate themselves if necessary. The Centre will sometimes say such things!"

Good Governance and its Relation to the South Centre

The Inter-Governmental Agreement, which we have agreed to uphold, sets out the structures and governing rules of the South Centre. They were drawn up in a manner intended to promote the Centre's ability to fulfil its stated objectives and functions. In particular, they were intended to safeguard it against political pressures inimical to objective analysis and recommendations regarding people-centred development in the South or particular regions of the South. And all the countries that signed the Agreement, or acceded to it later, accepted these safeguards.

The Chairperson and the Board are there to represent the South as a whole, and not their own governments, regions or any specific interests. Their important collective function is to strive to enable the Centre, through its work and activities, to discern, fashion and maintain a position reflecting a common denominator and outlook of the South, and not to subject it to the pressures associated with inter-governmental affairs.

We now have eight years experience of the Centre, and the workings of the Agreement. Not surprisingly, the voices of critics sometimes sound louder than those of people who think the Centre is doing a good job for the South (or who care less about it?!). But the period has certainly shown shortcomings in structures and other arrangements established by the Agreement. The Council looked at these in New York last year.

For example, the Agreement failed to make explicit provision for the immediate leadership of the Centre if and when the Centre's Chairperson dies in harness. Mwalimu's death, therefore, left a legal power vacuum for a substantial while. I am glad that we now have a Vice-Chairperson - a very qualified and able one assuredly - who can, under the Agreement, act as Chairperson until a Board Meeting is possible. The legitimate question raised by the Geneva-based Permanent Missions of member countries regarding greater participation and involvement in the activities and policies of the Centre has also been addressed, without having to change the existing governance structures.

But, since most of you are diplomats, I am sure you will understand that it is impossible for any national or international institution - especially if it is as small as our Centre is - to be kept free from political pressures unless its independence of thought and expression is deliberately safeguarded in its Constitution and Rules. And I suggest to you that it is still essential for the South Centre to be given complete intellectual autonomy to work for our service - the service of the entire South.

The Finances of the South Centre

There is an English saying, "He who pays the piper calls the tune." When Mwalimu Julius K. Nyerere agreed to be Chairman of the South Commission, and again later when he agreed to lead the South Centre, he was determined that the institutions would be for the South and governed by it. He said if the South wanted these institutions, they must agree to pay the basic costs of setting them up and running them. The only money from the North which was accepted for the Commission was that offered

by the Swiss authorities for the Commission's office.

We are very appreciative of the consistent support of the Swiss Government ever since. We will continue to need that assistance until we meet our goal of building the Capital Fund to a level which interest accruing from it would be sufficient to cover the basic core costs of running the Centre. We greatly appreciate this - and the new - help from the Government of Switzerland, and the spirit in which it has been, and is being, given.

The Centre's policy must remain that all its core costs should come from the South, and that no monies should be accepted from anywhere if conditions were attached to them -- apart from proper accounting and auditing -- which would impinge on the operation or integrity of the Centre. This includes the external financing of projects, which must only be those of our own choosing, within our work programme and activities, with no political or ideological conditions attached.

The truth, nevertheless, is that the Centre's future is now endangered and its continued existence depends upon us - the countries of the South. I have to repeat. We need the work of the Centre. Indeed, we keep on criticising it for the things it has not done, which we have called upon it to do. Yet, the small and too often reluctant and irregular contributions, which we, countries of the South, were making to the Capital Fund or the recurrent expenses of the Centre, have almost dried up since October 1999. A flicker of hope appeared after the July 2002 Inter-sessional Council Meeting here in Geneva. I thank all those countries that contributed to the Capital Fund account, and the Operating Expenses account. The challenge now is to ensure that flicker of hope bursts into a flame.

Where there is political will, there is a political way!

If we want the Centre, then we have to PAY FOR IT - and do so NOW. Unfortunately, there is no financial commitment attached to the Centre and no penalties for defaulting members. Some paying members have even suggested that this is a weakness, which has to be addressed. That is up for debate. But I repeat: the Centre cannot operate without money, and it is in our collective interest to ensure it focuses on the work we want it to do, rather than spend valuable time figuring out how to meet day to day operating expenses.

In conclusion, I want to once again commit my Government towards the goals, objectives and healthy survival of the South Centre. We need the Centre, and its work is of great importance for countries like mine that cannot afford to embark on all these tasks on our own. With the new support offered by the Swiss authorities there is much more scope for what the Centre could do for more members, especially the poorer ones. We in Tanzania have always believed in solidarity, and in working together, as well as in self-reliance. My hope is that this is a belief we all

share; otherwise, we would not be here.

The Centre has to maintain its name, status and dignity as an established institution of global renown and significance for its work. What has already been achieved should not be endangered; rather, it should form the basis for it to be protected, nurtured, strengthened and developed further.

Mahatma Gandhi said, "Freedom received through the effort of others, however benevolent, cannot be retained when such effort is withdrawn."

And what we want, as countries of the South, is freedom to be equal players and beneficiaries in global affairs of interdependence, and of globalisation. It is freedom to be what we are, and to be recognised and respected for what we bring to the global market place for goods, services and ideas. To be sustainable, such freedom must be based on our own efforts, as much as possible. I think we can do it, and I earnestly urge for more contributions from all members.

All our countries belong to various regional and international organisations and we try to ensure

we are up to date with our membership fees and contributions by providing for such fees and contributions in our national budgets. I am here to plead the case for similar treatment for the South Centre - our own Centre, doing our own work. Charity, indeed, must begin at home! And, in that respect, I hereby make a commitment that until such a time that the Capital Account will be sufficiently beefed up to enable the interest accruing from it to meet the Centre's operating expenses, Tanzania will, through its national budget, make a regular annual contribution towards the operating expenses of the Centre.

The French poet from the 17th century, Jean de la Fontaine, said, "Man is so made that whenever anything fires his soul, impossibilities varnish."

I end by urging countries of the South to fire their souls sufficiently, at the highest political levels, to enable the South Centre do for us the work originally envisaged, for the good of all our people, and for the solidarity and dignity of the South."

MAKING TRADE FACILITATION DEVELOPMENT-FRIENDLY

Trade Facilitation is one of the four 'Singapore' issues that are sought to be brought into the realm of WTO rule making. The developing countries are resisting their inclusion at this stage for many reasons. In an address to the Second International Forum on Trade Facilitation, on "How Can Developing Countries Receive a Better Share of the Benefits of Trade Facilitation?" Ambassador H.S. Puri, Permanent Representative of India, enumerated some of the pressing reasons. Following are extracts from Ambassador Puri's address to the Forum, organized by the United Nations Economic Commission for Europe, on 14 May, 2003.

"It is with pleasure that I speak at this International Forum on Trade Facilitation organized by the UNECE on a theme that is not only topical but touches the very heart of the trade facilitation issue -- establishing a positive relationship between trade and development. However, I would like to rephrase the proposition somewhat, given

the ground reality that we face and to pose it as follows: -- How and under what conditions can developing countries be enabled to receive a better share of the benefit of trade facilitation?

We base ourselves on the fact that the developing countries are at present significantly handicapped

in the race towards trade facilitation, mainly due to resource constraints and physical, social and trade infrastructure related inadequacies, given their stage of development. Their own efforts towards modernization and automation of trade procedures, particularly customs procedures and the support of the international

community will thus crucially determine the benefits to them, as will the pace and terms of their integration in this area.

Many developing countries so far have been autonomously moving towards an approximation of the four main ideals of rationalization, simplification, harmonization and automation of trade procedures, especially customs procedures, with emphasis on use of modern IT tools like EDI. Taking my country India's example, we have implemented the EDI at 23 customs locations covering major ports, airports, inland container depots and freight stations which cover 75 per cent of India's international trade. An EDI Gateway Project, under implementation, would provide a flexible and highly reliable framework to Customs for exchange of electronic messages with other partners. Fast Track Clearance Scheme, Self Assessment Scheme and an Accelerated Clearance of Import and Export Scheme [ACS] have been introduced on a pilot basis at a few ports. A Project team on Customs Re-engineering is working on several projects including Post Clearance Audit and Risk Management Strategy. Transparency is assured through real time availability of all rules and notifications on the DGFT/CBEC websites. Tariff structures have themselves been simplified through slab reductions on a number of duties and exemption notifications.

So it is recognized by developing countries that trade facilitation and efficiency is not only the wave of the future but a necessity of the present. Apart from autonomously working towards trade facilitation, a number of them are participating in voluntary schemes for trade facilitation convergence in the regional integration context. Multilaterally, this matter is being dealt with in the World Customs Organisation. Efforts, however, are being made

by developed countries to bring trade facilitation within the purview of the WTO as part of the 'Singapore Issues', presumably to make compliance with trade facilitation standards mandatory for all countries as part of a single undertaking with all that this implies in terms of binding, dispute settlement linked obligations.

The WTO and the mandatory compliance route to bridge the trade facilitation gap between developed and developing countries is not fair, desirable or in the best interests of either the developing countries or the development oriented trading system promised at Doha. Such an approach would ignore the reality of their resource constraints and crowd out their own welfare and development priorities. Instead, the correct approach would be a development led route which would allow developing countries to adapt and, as appropriate, adopt global best practices according to their own capacities, interest, priorities, resources and time lines.

This is particularly important when we consider that most of the trade facilitation standards that are being evolved and held up as models are those that are devised by the developed countries in the light of their own needs, experiences, capacities and objectives and bring to bear state-of-the-art technology and tools at their command. Their compliance with a global regime will be virtually cost free for them. Thus, not being standard makers, only standard takers, developing countries have a double disadvantage in trying to upgrade their trade infrastructure. They are challenged to adopt something which is not home grown and bear the cost of adjustment too.

Therefore, in order that trade facilitation yields efficiency and welfare benefits to developing countries, the following pre-

requisites need to be accepted and put in place: -

- i. Trade facilitation should not be looked at as an end in itself but a means to the goal of increasing trade revenues and thus development dividends for developing countries from international trade and investment. It is a process not a destination.
- ii. Trade facilitation should not be treated as a mechanical process which if addressed or redressed will at one stroke remove all the transaction related difficulties that the trade of developing countries faces. What is required is a systemic approach to different obstacles posed to an efficient flow of trade of developing countries that looks at both at the forward and backward linkages and the totality of their trade facilitation needs relating to their exports as much as their imports.
- iii. By backward linkages, I mean the supply chain of trade efficiency -- the entire realm of production, transport, services infrastructure and legal framework which feed into the developing countries' international trade effort. This has an impact on the speed, cost and predictability with which trade operations are actually completed. As we all know, in many developing countries, unless deficiencies in the state of road, rail, air and port infrastructure -- physical and institutional and their high costs -- are addressed, merely tinkering with customs procedures will not bring the promised benefits in terms of reducing barriers to trade, lowering transaction

- costs, dealing with corruption, raising revenues, making them more competitive from the perspective of global TNC and business community, and giving a fillip to their trade and investment opportunities and prospects.
- iv. By forward linkages I mean the international transport, logistical and financial frameworks and the complex trade restrictive procedures followed by developed countries which are their main markets. The low level of control developing countries have on the external dimension of facilitation related to their export trade is an issue of major concern and no amount of reform at the domestic end to strengthen the backward linkages will be able to compensate for their vulnerability in relation to the forward linkages. Several studies, including those by the UNCTAD, have pointed to the problems faced by developing countries in this area and to the fact that these external processes are largely controlled by the developed countries and their economic operators and have serious implications for developing countries.
 - v. One only needs to look at the security related initiatives recently taken such as the Customs, Trade Partnership against Terrorism [C-TPAT] and the adoption of measures such as the Container Security Initiative to understand how these could prove major drawbacks for developing countries in international trade and transport systems. It would involve re-routing of trade flows between certain origins and destinations, in particular those in the United States and call for a very high level of supply chain management capability, technological and financial resource mobilization and significant disruption of developing country trade whilst adding costs to their already heavy trade facilitation agenda.
 - vi. There are valid and legitimate reasons for developing countries to follow a staged path to establish an autonomous, sustainable trade management infrastructure. As UNCTAD has emphasized, the "objective is to facilitate in order to better control and better control for better management". Developing countries have their own security concerns and their cultural, social, political contexts within which they have to work out trade facilitation strategies. These concerns of developing countries are as relevant as concerns that may drive measures taken by some developed country partners and which profoundly affect the trade facilitation environment in key markets for developing countries.
 - vii. Developing countries would like to simplify procedures for their own exporters and for foreign operators trading with their country. They would like to raise revenue realization and compliance, and the efficiency and cost effectiveness of their international trade transaction. For this, they have a right to set their own methodology and time frame within the human and financial resources that they can spare and mobilize, adopting best practices as they think fit.
 - viii. Those pushing for an enforceable multilateral regime on trade facilitation in WTO argue that a voluntary approach is too slow and ineffective and, therefore, there is need to speed up the process of developing countries joining a world class trade facilitation regime. This logic is unacceptable. It is in developing countries' interest to make haste slowly so that they are able to manage the balancing of the cost and benefit of trade facilitation integration according to their ability, technological and institutional preparedness, and control across the supply chain of efficiency on one hand, and the external elements of the trade facilitation framework on the other.
 - ix. The WTO is not a suitable forum for dealing with trade facilitation issues and there seems to be no reason for duplicating work which has been on going in the World Customs Organisation – an expert customs body, in the context of the revised Kyoto Convention of WCO. There is no need to bring procedural issues to the WTO, a body focused more on trade rules, rights and obligations.
 - x. What could be particularly harmful to developing countries is if binding rules on trade facilitation are lodged in the WTO with the possibility of enforcing these rules through the dispute settlement mechanism. Even a developing country like India will find it difficult to meet standards of automation and modernization at all its ports, airports and land customs stations. Questions

could be raised not only about whether the right systems are in place but whether a particular developing country is operationally in compliance. Promises of S&D cannot be taken at face value given the lack of progress in this area in the Doha negotiations so far. The "one size fits all" transition time that may be offered will be of scant comfort and utility. Trade facilitation would thus become another onerous obligation on developing countries and provide developed countries with yet another sophisticated instrument for trade harassment against developing countries.

- xi. The debate so far in the context of the Doha Declaration to undertake exploratory and analytical work has involved a review of several GATT [1994] Articles, especially Articles V, VIII and X. Developed countries have made proposals to reinforce these provisions with a view to negotiate binding rules. Developing countries on the other hand have not responded positively and pointed instead to the lack of implementation of some of the key agreements with trade facilitation dimensions such as Rules of Origin, TBT, SPS and Customs Valuation.
- xii. It would be far better if there is concentration on finalizing work on these existing agreements which have profound implications for trade facilitation and on which developed country partners have not shown any political will to move. Two such issues are rules of origin and TBT/

SPS which could go a long way in trade facilitation from the point of view of developing countries and give them real benefits. In fact, the developed countries unwillingness and under-performance on speedy harmonization of Rules of Origin illustrates the double standards on the harmonization issue.

- xiii. For developing countries a flexible approach to harmonization of national systems to some international guidelines as opposed to a set of binding obligations would be optimally beneficial. It would allow them the benefit of progressive trade facilitation and integration while avoiding the loss of policy autonomy and additional institutional burden as well as high implementation costs.
- xiv. The issue of costs is very important since we are talking about how trade facilitation benefits to developing countries can be increased. The history of the Uruguay Round of MTNs give us a warning against pushing developing countries into agreements that impose heavy costs on them or are resource intensive without upfront and binding financial commitments from the international community. According to World Bank economists the implementation of only three of these resource intensive agreements - SPS, TRIPS and Customs Valuation would on average cost a typical developing country at least \$150 million, not to speak of outgoes in terms of revenue

loss or development and welfare foregone.

In conclusion, Mr. Chairman, I would like to reaffirm that the only way to reach the laudable goal of a global trade facilitation regime in a manner that increases developing country benefits from it and from international trade, is for it to be progressive, voluntary and not linked to WTO's enforceability provisions and dispute settlement mechanism. It could be based on some guidelines and proven systems for trade management. Regional efforts among developing countries and on a North-South basis which help the developing countries gradually adjust to a common regime, could be useful stepping stones to a global regime. Reinforcement of capacity building and technical assistance, both bilateral and by organizations like UNCTAD, would go some way in catalyzing the process. Substantial and additional financial resources should be provided by IFIs and donor community to developing countries to meet the institutional and other adjustment costs as also to upgrade their entire trade and transport infrastructure both in the short and medium term. Implementing other key aspects of trade facilitation already agreed to in the WTO, especially those which have serious market entry implications for developing countries in regard to developed countries markets and which raise the cost of trade transactions and affect their competitiveness such as rules of origin, TBT and SPS should be a priority for developed country compliance and positive action. No trade constricting and displacing measures should be taken by developed countries, including in the area of trade, transport and facilitation infrastructure, which may have a detrimental effect on developing country exports and on their trade and investment gains."

LIBERALIZING AGRICULTURAL TRADE AND DEVELOPING COUNTRIES

Progress in reducing agricultural support and protection among the world's wealthy countries would be an important accomplishment for development and strengthening of multilateral trade regime, argue David Orden, Rashid S. Kaukab, and Eugene Diaz-Bonilla. They expressed their views in a recent article (reproduced below) in the 'Trade, Equity and Development' published by the Carnegie Endowment for International Peace. David Orden is professor of agricultural and applied economics at Virginia Tech and chairman of the department's graduate program. Rashid S. Kaukab is Coordinator of South Centre's Programme on Trade & Development. Eugenio Diaz-Bonilla is a senior research fellow at the International Food Policy Research Institute, where he coordinates the Global and Regional Trade Project.

Agriculture is at the heart of the "Doha Round" of multilateral trade negotiations that were launched by the World Trade Organization (WTO) at its ministerial conference in November 2001. But governments are far apart. Agriculture has been treated as an exception to the rules, as a "special case" outside the multilateral trade-liberalizing process, since the General Agreement on Tariffs and Trade (GATT) was agreed upon after World War II. In successive GATT rounds, significant progress was made in liberalizing border protection and non-tariff measures within borders on industrial products. But little progress was made to stem the increased support and protection afforded to agriculture in developed countries.

Agricultural policies are based on price-support measures and subsidies of various kinds sustained by heavily restricting imports from lower-cost producers abroad. These policies result in massive distortions of production, consumption, and trade in the agricultural sector. Production and export subsidies in developed countries have depressed agricultural commodity prices in "world" markets and closed off trade opportunities, often for countries that are very poor. Recent studies put the resulting loss of rural income among developing countries as high as \$60 billion annually. Protection and subsidization in developed countries have also pushed producers to adopt intensive-farming methods that are damaging to the environment

through water pollution, soil degradation, and loss of biodiversity.

It was not until the Uruguay Round negotiations of 1986-1994 that governments started to address these distortions by bringing agriculture into the multilateral trade-liberalizing process. In those efforts, the European Union (EU), Japan, Norway, and Switzerland opposed reductions in support and protection. The United States and the newly formed Cairns Group of smaller agriculture-exporting countries initially favored fundamental reforms.

For developed countries, the 1994 WTO Agreement on Agriculture (AOA) provided for (a) the reduction of trade-distorting domestic supports by 20 percent relative to a 1986-1988 base-period average, (b) the reduction of tariffs of 36 percent from a 1986-1988 base-period average, and (c) the reduction of export subsidies of 36 percent in value terms and 21 percent in volume terms from a 1986-1990 base-period average. These are only modest accomplishments in reducing support and protection. Achieving substantial reforms in the Doha Round negotiations will require a concerted effort by the Cairns Group countries, by other developing countries that are adversely affected by protectionist agricultural policies, and by the United States, which has been a force for multilateral liberalization but has recently enacted legislation that increased its farm subsidies.

On September 11, 2002, the Carnegie Endowment for International Peace and the Cordell Hull Institute sponsored a meeting in Washington, D.C., on liberalizing agricultural trade and the interests of developing countries. Participants came from two broad perspectives. The first "development" perspective emphasizes trade as a possible avenue for raising standards of living in relatively poor countries, but has been critical of the WTO, which is perceived as tilted against the poor. The second "trade-liberalization" perspective emphasizes that global welfare, development, and poverty alleviation are best served by multilateral liberalization of trade and trade-related investment in a stable, or rules-based, institutional environment.

The conference aired a variety of views and identified common ground among the proponents of agricultural liberalization. This paper summarizes areas where there is broad agreement and notes other areas where views differ. One point deserves to be highlighted at the outset. Progress in reducing agricultural support and protection among the world's wealthy countries would be an important accomplishment for development and the strengthening of the multilateral trade regime.

Areas of Agreement

Progress in reducing trade-distorting protection and subsidization of agriculture should be pursued ag-

gressively in the Doha Round negotiations. From this follows agreement on the merits of achieving reform of agricultural support programs in the developed world, lowering tariffs to improve market access, and eliminating export subsidies.

Domestic Support

Development advocates are suspicious of agricultural subsidies in developed countries. These suspicions are well founded. Subsidies stimulate domestic production not only through direct price effects but also through indirect effects arising from reduced risk, enhanced cash flows, or increased wealth of producers. Under the various AOA provisions, the EU, Japan, the United States, and other wealthy countries spend \$200–\$300 billion annually to support agriculture. These subsidies are of an order of magnitude equal to world agricultural trade! No wonder developing countries, with less fiscal resources, see the WTO rules for agriculture as unfair.

Among the price-support, income-support, and other subsidy policies utilized in developed countries, some create more trade-distorting stimulus to production than others, while a few restrain output. One needs to tread carefully among these domestic subsidies when pursuing reforms. Under the AOA, subsidies are categorized in colored boxes. “Amber box” policies are directly trade-distorting, and these expenditures, aggregated across all commodities, are subject to limitation commitments by countries. “Green-box” policies are presumed not to affect trade directly, or to have offsetting social benefits, and are exempt from AOA expenditure disciplines, although they often have indirect production-stimulating effects. A special accord between the United States and the EU, reached at the conclusion of Uruguay Round, established

a “blue box” of policies that combine potentially trade-distorting support with some supply-constraining provisions, and again are not subject to AOA expenditure limits. There are also “loophole” provisions regarding *de minimis* subsidies that allow additional product-specific and non-product-specific amber-box payments up to a certain percentage of the value of total agricultural production (5 percent for developed and 10 percent for developing countries).

Subsidy expenditures are high in the EU, largely in the amber and blue boxes providing incentives for increased production that affects trade. Since 1996, U.S. subsidies have been in the amber and green boxes. The 2002 U.S. farm act sharply increased amber- and green-box price- and income-subsidy authorizations for the next six years, stimulating production without imposing supply-control eligibility criteria on farmers. Yet domestic support is a complex area. The EU blue-box policies require that some land is taken out of production annually. The new U.S. farm act continues long-term idling of land under the Conservation Reserve Program (CRP), as well as price-support and income subsidies. Authority for the CRP (a green-box policy) rose to nearly 40 million acres—more than 10 percent of the harvested U.S. crop acreage.

A second area of complexity concerns public research and extension expenditures that enhance agricultural productivity. Subsidies in this area fall in the green box. Higher productivity raises output and makes possible a low-priced world food supply but does not impoverish farmers because productivity gains also lower costs of production. Productivity-induced reductions in production costs are of enormous benefit in a long-term perspective, particularly to the poor. Public policies for stimulating im-

provements in agricultural productivity that will raise income and food consumption among low-income people remain important. There is a need to provide adequate funding in developing countries for agricultural research and extension, and for productive and social infrastructure in rural areas, which require, among other things, additional commitments by international financial institutions and donors.

A third complex area is “non-trade” or “multifunctionality” concerns, such as protection of the environment or maintenance of a picturesque rural landscape. Both development and trade-liberalization advocates are wary of using these concerns to rationalize policies that either increase agricultural production in developed countries or limit market access. Environmental goals are better achieved by policies that do not restrict trade. Subsidy policies in developed countries are themselves a cause of environmental degradation because of the intensive farming methods they stimulate.

Constraining the production-stimulating and trade-distorting subsidies of developed countries is best achieved by negotiating substantial reductions in amber-box support policies, including *de minimis* expenditures that are tied to production or prices. In addition, countries should eliminate the blue box entirely and ensure that there are effective limits and reforms of supposedly trade-neutral policies under the green box. In all three cases, progress will require both clear language and vigilant observation, backed by the WTO dispute-settlement process and accumulation of adjudicated outcomes that secure adherence to negotiated agreements.

Market Access and Tariffs

The WTO rules for agriculture are still special compared with those

for other goods. Agricultural trade is restricted by nearly 1,400 tariff-rate quotas (TRQs) that limit the quantities of commodities imported tariff-free or subject to low tariff rates. Tariffs on "over-quota" quantities are usually prohibitive, so the TRQs under the AOA are not much different from the older quantity-based import quotas they replaced. Both developed and developing countries utilize TRQs (43 countries in all, including 21 developing countries), but those imposed by developed countries cause the most substantial barriers to trade. Those agricultural products for which trade is not limited by TRQs are subject to an average tariff level that is high compared with industrial products. In key cases, agricultural trade is severely constrained or precluded by tariff "peaks" on particular commodities in which developing countries have an advantage in production.

Market access should be expanded in the Doha Round negotiations to provide greater agricultural export opportunities for low-cost producers. As long as over-quota tariffs are prohibitive, expanding the shares of markets open to trade requires more than increases in the absolute quantities of trade under TRQs - it requires that TRQs expand as a percentage of domestic consumption. This is the only way to ensure greater international competition within the most restricted agricultural markets.

Tariffs must be brought down broadly on agriculture products, including those for which over-quota and other high tariffs now preclude trade. Widespread tariff reduction with a maximum tariff of less than 50 per cent on any agricultural product is a worthy goal for the Doha Round negotiations.

Technical measures used by countries with regard to food safety and quality and to plant and animal health are increasingly contentious.

Development and trade-liberalization advocates agree that safety, quality, and health measures will differ among countries, but that unnecessary technical trade barriers should be avoided. The WTO agreements on sanitary, phytosanitary, and other technical barriers to trade, together with the WTO dispute-settlement procedures, provide a basis for disciplining misuse of technical measures. Developing countries will need to receive assistance in meeting the standards set by developed-country importers for food products, to ensure their own standards are met with increased trade, and to participate fully in global standard-setting and dispute-settlement processes.

Export Subsidies

Developing-country agriculture is at the greatest disadvantage when explicit export subsidies are utilized. In these cases, which amount to dumping, the *prima facie* evidence confirms that farmers in the subsidizing country are receiving higher prices for their output. The subsidized products then enter world markets and choke off sales by countries that do not subsidize. Export subsidies, more than 90 percent of which are deployed by the EU, should be eliminated within a short period of time -- five years or sooner. Other forms of "export competition," notably export credits and food aid, should also have effective disciplines.

Reform Compensation Policies

Reductions in subsidies and border protection that are desirable overall can negatively affect the incomes of traditional producers. Policy makers may have to address these impacts to create the political space for agricultural reforms. In developed countries, compensation often comes through domestic institutions, but developing countries have less capacity to address redistributive issues.

An illustrative case arises under the new U.S. farm act. Until 2002, peanut production for the U.S. domestic edible market was constrained by internal marketing quotas and import TRQs. The domestic price was kept at about double the world price, so domestic and foreign suppliers with access rights benefited at a cost to domestic consumers. With the 2002 legislation, the U.S. market price of peanuts falls, with the marketing quotas replaced by direct government payments to domestic peanut producers, even if they switch to growing other crops. This is a desirable change in policy because it reduces a consumer distortion, creates planting flexibility, and makes it easier for the United States to eliminate use of its peanut TRQs. But foreign producers (including those in Argentina, China, and Mexico) bear a cost, because they are not compensated for lower prices under the new law.

The recent change of U.S. peanut policy points out the desirability of broader, possibly international, compensation measures when beneficial changes to domestic or trade policies in developed countries have substantial negative effects on some producers. Other cases arise in which low-income countries have preferences eroded by trade liberalization in developed countries and for some extremely poor developing countries that are net food importers.

Differences in Perspectives

Significant differences in perspectives and policy prescriptions between development and trade liberalization advocates occur over the appropriate speed and scope of agricultural liberalization in developing countries, especially if substantial progress in reducing subsidies and protection is not achieved by developed countries. These differences emerge from different views on the advisability of

policies to “tilt the balance” toward protection of developing-country agriculture. Such policies are defended by some development advocates, either as self-justified measures or for the purpose of offsetting the effects of developed-country agricultural policies. Trade-liberalization advocates are suspicious of policy interventions that involve substantial deviations away from a trade-oriented norm, even those aimed at developing countries. Agricultural trade among developing and “transition” countries amounted to more than \$50 billion annually in 1998-2000 and is projected to increase in the next decades, compared with their exports to developed countries of around \$75 billion. To trade-liberalization advocates, this suggests caution over recommendations for protection of agriculture within developing countries.

Protection of Agriculture

The AOA requires less tariff and subsidy reductions by developing countries than by developed countries. Development advocates particularly favor this and other WTO “special-and-differential treatment” that allows less or slower trade liberalization to occur in developing countries. They object to unilateral agricultural trade liberalization by developing countries and have called for higher tariffs or other trade barriers for basic food crops to induce more domestic production and protect developing-country agriculture, particularly small farmers, from low-priced or subsidized imports. Development advocates often argue that these measures are justified in developing countries that suffer from chronic balance-of-payments deficits and where large agrarian populations depend on local production for food and other needs.

Trade-liberalization advocates believe that most proposals for higher protection in developing

countries have a net negative effect, including on nonfarm (landless rural and urban) poor in the countries that might resort to such policies. Widespread use of consumer subsidies for basic foods to offset producer protection is a costly fiscal approach that developing-country governments can ill afford. Trade-liberalization advocates are also concerned that increasing the protection of agriculture by developing countries (where most of the future market growth is expected) will undermine the limited support for agricultural policy reforms that can be energized in developed countries. There may be some scope for short-term, simplified “safeguards” for poor countries in a limited number of products, when import surges or dramatic price declines affect the livelihood of a substantial number of low-income farmers. But trade-liberalization advocates would exercise great caution in letting such policies escalate into too much protection or agriculture.

Development Box

Calls for special-and-differential treatment have coalesced around the creation of a new “development box” that would apply to developing countries only. Some provisions of the development box reiterate the need for wealthy countries to open their markets to agricultural products from developing countries. Other provisions of the development box are designed to give developing countries room to pursue policies aimed at reducing poverty and achieving sustainable rural development, particularly focused on low-income farmers, and on ensuring food security.

Proponents of the development box recognize that the “food-security” argument is used for protectionist purposes in wealthy countries --as in Japan and the United States, when U.S. President George W. Bush claims that sup-

port for agriculture is necessary for national security. They are therefore careful to keep the development box proposal separate from the nontrade and multifunctionality concerns of the developed countries.

Trade-liberalization advocates are wary of protectionist policies justified by food-security arguments. Existing AOA amber-box rules give developing countries some latitude to achieve their objectives. To the extent that development policies do not go too far toward creating trade distortions, there is room for further measures under the green box. Developing countries often lack the fiscal resources to utilize the existing boxes or any additional expenditure opportunities under a new development box. Development and trade-liberalization advocates support international funding for basic investments in rural development and poverty alleviation programs but caution against too loose an interpretation of the green box or any new box to subsidize production, even by developing countries.

Commodity Markets

A large number of low-income developing countries are heavily dependent on raw agricultural products or other nonfuel commodities for their export revenues. These countries are particularly exposed to a decline in commodity prices (the price index of commodities declined by 47 percent between 1982 and 2001) as well as to relatively high year-to-year price volatility for these commodities. The GATT and WTO agreements acknowledge the problems of low-income countries that are dependent on exports of basic commodities, and the importance of open market access for these products.

Development advocates assert that the WTO should address the problems faced by comm-

oditydependent developing countries. They point out that actions such as the removal of tariff peaks, tariff escalation, and other nontariff barriers are desirable, along with policies to facilitate predictable market access for processed agriculture exports from developing countries.

Some development advocates argue further for strengthened international commodity agreements—along the lines of market-sharing cartels—to restrict supply and raise world prices of basic agricultural commodities of importance to developing countries. This recommendation is directed specifically against the trend of declining real prices of basic commodities that has occurred. Development advocates have also proposed that agricultural prices be supported on the basis of costs of production.

Trade-liberalization advocates look askance at proposals for international commodity agreements. These agreements are viewed as misguided attempts to intervene against fundamental economic forces with government-orchestrated market power. Trade-liberalization advocates argue for letting market forces determine commodity prices by directing resources into or out of production until prices cover costs. They are sometimes more sympathetic to price-stabilization efforts, but historically it has

been impossible to separate price-stabilization programs from price support.

Biotechnology

Notwithstanding basic agreement on the desirability of cost-reducing technological innovations in food production, there are disagreements about the benefits of recent biotechnology-based crops. One group of development advocates perceives this new technology as having the potential to provide a quantum leap forward in worldwide human nutritional status, resulting in far fewer malnourished people. Other development advocates oppose the technology for its potential environmental risks or cultural implications and for the licensing fees required to gain access to it. Trade-liberalization advocates who adhere to the standard of science-based risk assessment incorporated in the WTO agreement on sanitary and phytosanitary measures are also divided on biotechnology. As with other new technologies, the resolution of conflict lies in specificity. The case for or against specific biotechnology innovations needs to proceed on the basis of scientific risk assessments and economic benefit–cost analysis.

Conclusion

There are substantial grounds for agreement about agriculture be-

tween advocates of international development, poverty alleviation, and food security and those who broadly advocate strengthened global trade opportunities and institutions. Agriculture has been a special case in which trade liberalization has hardly progressed. Subsidization and protection of agriculture remain the norm in developed countries. The prevailing regime of support and protection in developed countries, with less support and often less protection in developing countries, is not desirable for global economic development, the environment, or the integrity of the multilateral trading system. For these reasons, agricultural trade liberalization must be pressed forward in the Doha Round negotiations.

Disagreements still persist over whether agricultural products should be subject to the multilateral trade-liberalizing process and WTO rules in all countries, or should continue to be treated as special, but with more policies introduced to favor agriculture in developing countries. Agricultural policies remain diverse and complex worldwide, and there is a host of related questions that warrant further discussion. Pursuing agricultural trade liberalization to reduce trade-distorting subsidization and protection will be best served by thoughtful discourse with a relatively toned-down rhetoric.

AUSTRALIA REJECTS GE FOOD CROPS

Sydney, 8 May (DNS) — Australia will remain free from genetically engineered (GE) food crops for at least another year, following the announcement of a freeze on the commercial release of GE canola, by yet another state government, according to Greenpeace.

The twelve month freeze by the southern state of Victoria, now means all major Australian canola growing

states have imposed some form of moratorium on the commercial release of the country's first proposed GE food crop, for 2003.

Greenpeace Australia Pacific campaigner John Hepburn said, "Despite the failure of our national regulatory system, state governments have thankfully listened to the majority of farmers and to the general

community who are opposed to the introduction of GE canola".

The Victorian decision comes as a major blow to applicants Monsanto and Bayer, who have lobbied strongly for the release of their GE canola products. As one of the world's largest exporters of canola, Australia is seen as a key area for expansion of GE crops, which are reported to be struggling to find acceptance out-

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FIGHTING MALNUTRITION: TRADE LIBERALIZATION OR INCREASE LOCAL FOOD PRODUCTION?

Relying on trade liberalization in agriculture to solve problems of malnutrition and hunger in developing countries may not bring the desired results. For one, the poor may not have the means to buy if food was available. The alternative, of boosting local food production, can be a more direct route to reducing malnutrition, as it also boosts the local economy. That is the finding presented in the following article by Daryll E. Ray, who holds the Blasingame Chair of Excellence in Agricultural Policy, Institute of Agriculture, University of Tennessee. He is the Director of the UT's Agricultural Policy Analysis Center. In fact, in the WTO context, even the Marrakech decision recognized that the Net Food Importing Developing Countries (NFIDCs) and the Least Developed Countries (LDCs) are to be provided with technical and financial assistance to improve productivity. The article was posted at the website of the Institute for Agriculture and Trade Policy (IATP) on 5 May 2003.

In 1996 the World Food Summit adopted a goal of "halving the number of undernourished people in the developing world to approximately 400 million by 2015." Seven years into the international program, figures indicate that only 31 of 97 targeted countries have seen a decrease in the malnutrition rate.

One of the prescriptions offered for decreasing the level of malnutrition in developing countries is to liberalize international trade so these countries can increase their exports of those products for which they have a comparative advantage and use the export earnings to import food for local consumption. Others have suggested that, from a food security point of view, increasing local production will do more to reduce malnutrition than depending upon imports. With only 31 of 97 countries in line to reach the goal, can we begin to answer the question of the relative merits of food imports vs. domestic production when it comes to reducing malnutrition?

In a graduate seminar I taught this semester one of our international students tackled this question and I found his methodology and preliminary conclusions very interesting. Before sharing his data with you, I would caution you that the conclusions are tentative and need to be confirmed by more detailed research.

Hiroyuki Takeshima found that nine countries with a large increase

in daily calorie consumption between the 1961-1965 period and the 1998-2000 period, all increased their domestic production of their basic staple crop at a rate faster than the rate of increase in population.

For instance, China's population grew by 80 percent while the production of rice, which provided 31 percent of dietary calories, increased by 160 percent. The production of wheat, which provided another 21 percent of daily caloric intake, increased by a whopping 480 percent and the production of pigmeat (10 of dietary calories) increased by an astronomical 990 percent. Over the 40 year period of his study, Takeshima found that the average daily caloric intake in China increased by 1,213 calories of which 75 came from imports. The rest came from increased domestic production.

Brazil saw its population increase by 110 percent while sugar production (19 percent of daily caloric intake) increased by 370 percent. Wheat production (12) increased by 320 percent. At the same time that it increased its average daily intake by 653 calories, Brazil decreased its net imports of foodstuffs by 381 calories a day. That is to say local production increased its share of the average daily diet by 1,034 calories. The numbers vary from country to country, but the pattern is evident. For these nine countries that increased their daily average caloric consump-

tion, thereby decreasing malnutrition levels, increases in local production were more important than imports.

There were other countries like Iran, Iraq, Algeria, Peru, Nigeria, South Korea and the Philippines where food imports contributed significantly to improved nutritional levels. In three of those countries (Peru, Algeria, and South Korea), on a per capita basis, local production actually decreased.

Of those countries with a decreasing level of daily caloric intake, the Democratic Republic of the Congo saw a population increase of 190 percent while the production of cassava (56 percent of average daily caloric intake) only increased by 80 percent. For the Democratic Republic of the Congo, the failure of local production to keep up with the growth in population meant that the country saw the average daily caloric consumption decrease by 638 calories despite increasing imports by a per capita average of 252 calories. Similar stories can be told looking at the numbers for many other sub-Saharan African countries like Kenya, Madagascar, Zambia, and Burundi. In each case, increased imports were not enough to stave off drops in local production, resulting in a decrease in the average daily caloric intake.

No doubt, the use of international trade to purchase staples paid for with money from exporting

other farm products, for which the country has a comparative economic advantage, is an appropriate route to decrease malnutrition in some countries. But that may not be a universally successful approach to making more food avail-

able to the malnourished. The trade approach implicitly assumes that the earnings from exporting non-staples agricultural products will be spent in ways that will increase the calorie intake of the country's citizenry.

Increased supplies in a country's town markets of locally-produced staples often can provide a direct means for a country's populace to secure additional food.

SCIENCE, BIOTECHNOLOGY & TRADE: THE INTERFACE

The application of biotechnology to the main areas of agriculture and health in developing countries presents a number of challenges, besides opportunities. Principal among them are the trade-related issues and the legal and regulatory regimes in biotechnology and their implications in meeting the priority needs of developing countries. Rubens Ricupero, Secretary-General of UNCTAD, provided a brief overview of the interface between 'science, biotechnology and trade' at the recently held Second Policy Dialogue of the Science and Technology Diplomacy Initiative on Biotechnology Applications and Trade, in Geneva. Keynote speakers included Professor Werner Arber, winner of the Nobel Prize for his work in biotechnology; Professor Gary Sampson, Chair of International Economic Governance at the United Nations University's Institute of Advanced Studies; and Professor Ingo Potrykus, the inventor of the genetically modified rice 'Golden Rice' that could address Vitamin A deficiencies of people in developing countries. Following are extracts from Mr. Ricupero's address.

Science today has become a test case in international negotiations at the WTO involving science and technology. Negotiators require greater understanding of the scientific underpinnings of trade issues. They will be called upon to interpret not only the economic, legal and social impacts of international agreements but also the scientific knowledge upon which they are based. Controversy over transgenic products, for example, has stepped up the demand for product labelling, but labelling creates its own problems: it can increase production costs, amounting to another form of regulatory protectionism, and it can result in the undeserved stigmatization of labelled products.

For developing countries, navigating through these trade-related issues is a daunting task. First of all, many international agreements are highly technical and scientific in nature. As the science becomes more sophisticated, so do the relevant regulatory and governance regimes. Secondly, determining the benefits, opportunities and risks of many of the multilateral agreements, such

as TRIPS, in terms of access to drugs, food security, investment and technology transfer is difficult for countries with limited resources. Thirdly, any barriers that effectively deny developing countries access to markets in industrialized nations will affect technology transfer, investment and poverty alleviation in general.

The Science and Technology Diplomacy Initiative, established by UNCTAD in collaboration with Harvard University's Science, Technology and Innovation Program, is in my opinion an important first step in meeting these challenges. The Initiative aims to strengthen the capacity of trade diplomats, especially from developing countries, to participate more effectively and to make informed decisions in the negotiating process.

Biotechnology has penetrated all areas of human endeavour and transformed the way life is perceived. It has moved from the laboratory to the doctor's office and the dinner table. Its impact is being felt in four key areas:

- i. **Agriculture**, in the form of increased yields, reduced use of pesticides and tillage;
- ii. **Medicine**, in the form of drug and vaccine development, diagnostic and genetic profiling;
- iii. **Industry**, in the form of energy and water consumption and waste generation; and
- iv. **Environment**, in the form of recyclable materials such as bioplastics, recovery of wastelands and conservation of endangered species.

Science is increasingly being used as a tool for regulating trade in a number of areas and products. As you know, the WTO was established to facilitate trade through the elimination of barriers to promote global wealth. It does, however, allow restrictions based on health and safety through sanitary and phytosanitary (SPS) measures. Biotechnology has also generated a debate about the need for regulating science and trade. Some of the areas where the two domains come together are as follows:

- i. Setting standards (such as those for industrial and home units and systems);
- ii. Establishing safety measures (e.g., to reduce human, plant, animal and environment risks, and/or as part of the SPS agreement);
- iii. Management and monitoring (for example, of the risks or actual outbreak of disease); and
- iv. Settlement of trade disputes (e.g., technical barriers to trade).

Agreed standards of regulation and management have to be maintained. In the area of biotechnology these measures are still in their infancy, and consensus has yet to be established. International agreement is required on such issues as:

- i. Safety of genetically modified living organisms;
- ii. The tracing and labelling of genetically modified products and services;

- iii. The free movement of GMOs and their products;
- iv. Intellectual property rights applicable to plants, animals and products of biotechnology; and Access to genetic resources and fair sharing of benefits.

There are four key questions to be debated here today:

- i. **The precautionary approach as an optional policy tool** Countries can ban a product based simply on the lack of evidence that it is safe. Normally, such bans would instead be based on the absence of evidence that a product is harmful.
- ii. **Differences in product definitions** Those who perceive transgenic products as fundamentally different insist on labelling and strict regulation, while those who think that such products are identical to similar but non-transgenic products do not demand labelling.

iii. Increased turnover of technology in an uncertain policy environment While technology is changing very quickly, regulators are faced with the challenge of risk assessment and management. All countries have failed to approve transgenic fish even though there is no evidence of potential harm. This difficulty is faced by both developed and developing countries.

iv. Public concerns and regulatory regimes In an age defined by the technological transformation of life, public participation and awareness of science, technology and trade issues has also grown. This presents yet another challenge to policy makers.

To help us understand these and other issues related to biotechnology and trade, we are honoured to have with us today three eminent individuals, all of whom possess in-depth knowledge and experience in both scientific and regulatory issues of biotechnology. I am happy to welcome them to our gathering.

BIOTECHNOLOGY APPLICATIONS: INTERNATIONAL POLICY & TRADE PERSPECTIVES

The applications of biotechnology have serious implications for international trade and trade policy. A number of connected issues are at this moment under serious discussion in the context of multilateral trade policy. "What is at stake is maintaining the effective operation of the multilateral trading system while dealing with concerns that go far beyond conventional trade policy," argues Professor Gary P. Sampson, Chair of International Economic Governance at the United Nations University's Institute of Advanced Studies (IAS). The following article reproduces the comments he made recently at the 'Science and Technology Diplomacy Initiative: Policy Dialogue on Biotechnology Applications and Trade', organised jointly by IAS/UNCTAD on 11 March, 2003.

The topic of my presentation today is the implications for international trade and trade policy of the various applications of biotechnology. A general point that I would like to make in this talk is that this relationship is not only important in itself, it also presents an excellent case study of how trade rules now find themselves on centre stage in

areas that - even in the recent past -- would not have been considered to be the domain of conventional trade policy.

Biotechnology includes techniques that use living organisms to modify products, plants and animals or to develop micro-organisms for specific use. It has been practiced

by human society since the beginning of recorded history to bake bread, brew alcoholic beverages, and cross-breed food crops or domestic animals. However, public interest in biotechnology has increased greatly in recent times. Genetic engineering now permits the characteristics of living organisms

to be changed by transferring genetic information across species boundaries too distantly related to permit natural cross breeding. It is this transfer of genetic information that has contributed to the most vocal public reactions and the call for its regulation.

In this respect, there are numerous issues which many people feel strongly about. There are fears as to whether the release of living genetically modified organisms into the environment would have potentially deleterious consequences for Mother Nature. There are also concerns that the development of genetically modified crops could create a monoculture that could put food security and traditional agricultural crops at risk. There are fears about the consumption of food derived from genetically modified organisms that could damage public health. Other concerns relate to equity considerations. It is argued that developing countries which are rich in genetic material are not adequately rewarded when this resource is tapped, modified genetically, and marketed by companies from the developed world. Then there are ethical considerations. Some question whether it is appropriate to provide for the patenting of life in the form of genetically modified plants, animals, or micro-organisms? Another concern is how the international community can deal with the situation where some life-saving drugs are the product of modern biotechnology, expensive, and out of reach for impoverished people.

What I have just sketched out is a vast area of economic, social and cultural importance. Thinking in terms of conventional trade policy, it would be perfectly excusable to ask what is the link between these issues and the subject of this talk – *the implications for international trade and trade policy of the*

applications of biotechnology. The answer is that all of these issues are at this moment under serious discussion in the context of multilateral trade policy.

In what follows, I would like to briefly draw on three areas of the relationship between trade policy and biotechnology to point to the complexity of the policy implications. The areas I will deal with could be considered as core activities of the WTO: improving market access for the exports of all member countries of the WTO, creating multilaterally agreed rules to bring predictability and stability to international trade, and finally, coordinating with other agencies to bring greater coherence to global policy making. I would like to close with a few remarks about the policy implications that follow.

First, are the market-access considerations.

A number of WTO agreements have as their objective trade liberalisation and the maintenance of open markets. There is no doubt that there is a vast potential trade in the products of biotechnology: both living modified organisms and human and animal food.

In the pursuit of creating and maintaining open markets, the WTO has as a principal function the avoidance of unnecessary barriers to trade. In this respect, one of the major challenges facing WTO members is to provide the appropriate flexibility for governments to adopt their preferred domestic policies they think appropriate to protect public health and the environment without the associated measures being used as disguised barriers to trade.

In the case of biotechnology, not all WTO governments have the same views as to what are in fact appropriate regulatory policies. The liberal views of countries such as

the U.S. and Canada toward GMO food products, for example, differ significantly from a number of European countries, hostile to the cultivation and import of genetically modified organisms and products derived from them. This has important implications for trade.¹

The WTO Agreements that are important for trade in biotechnology products deal with the protection of the environment, human health and plant and animal life: they state clearly that governments may adopt whatever standards they consider appropriate to achieve their domestic goals, encourage them to adopt international standards but permit them to deviate from these standards under certain conditions. The justification for not using international standards for food safety and animal and plant health protection are scientific arguments resulting from an assessment of the potential health risks.

In the absence of international standards, or in the case of non-adherence to them as a domestic policy choice, a number of questions are raised. In such cases, what should be considered legitimate in terms of trade restrictions, and who is to decide on legitimacy. In this instance, what is the relative weight to be assigned to science and societal choice in the determination of standards. Otherwise put, how precautionary can regulations be.²

If decisions relating to the legitimacy of measures reflecting societal choice gravitate towards the WTO dispute settlement, the WTO will find itself between a rock and a hard place in taking decisions that certainly serve to undermine its credibility in the eyes of the public in areas where many feel passionately.

If doubts were ever held about the emotion that surrounds these issues, they should have been dispelled by the outburst some

weeks ago when the United States Trade Representative branded the European Commissioner for Trade as both a “Luddite” and “immoral” because of the European approach to trade in biotechnology products. These remarks were coupled with the threat of taking the differences to the dispute settlement process of the WTO.³

Let me now turn to the second set of issues, those relating to rules – and more specifically intellectual property rights.

At the time of the Uruguay Round, the link between trade and property rights was successfully made by negotiators and the Trade Related Intellectual Property Rights (TRIPS) Agreement emerged at the WTO as a result. The link here is not with trade and biotechnology *per se*, but rather the implications of what are now trade rules for biotechnology.

While the Agreement makes no reference to biotechnology, it does provide for the patenting of micro-organisms. This has important implications for a number of ethical considerations. For example, views differ greatly on ethical, religious and other grounds as to the appropriateness of patenting and owning life forms. Some hold that the species barrier is a law of God or nature, believing that species have an inherent integrity. According to a report prepared by the Church of Scotland for example: “An animal, plant, or micro-organism owes its creation ultimately to God, not human endeavour. It cannot be interpreted as an invention or a process ... a genetically modified mouse is completely different from a mouse trap.”

Intellectual property rights and the patenting of micro organisms is also important for the preservation of biodiversity. While a large part of the world’s population lives in poverty, this poverty exists in areas

where a substantial portion of the world’s biological diversity survives and provides an invaluable resource for pharmaceutical, food, cosmetics and many other industries in the developed world. According to the principles of international law, states have the sovereign right to exploit their own resources pursuant to their own environmental policies. It could be argued that intellectual property rights and the protection of biodiversity are conceptually unrelated. However, as governments have the right to control the access to genetic resources, and intellectual property rights provide a possible mechanism for controlling the use of information relating to genetic resources, the link is established.

The question that is posed by some, is whether the current system of intellectual property right protection is the most equitable for developing countries. The point is made that indigenous knowledge is developed by being shared amongst the members of the community such as the elders who have the wisdom of years of experience which adds further value to knowledge. In this sense it has always been in the public domain of the community and therefore fails to meet the non-obviousness criteria of a patent.⁴

Third, there are issues relating to coherence across different multilateral treaties.

In the broadest sense, since the WTO rules and multilateral environmental agreements represent different bodies of international law, are we sure that there are no inconsistencies between them and are they mutually supportive?

The Cartagena Protocol on Biosafety is the first international legal instrument to deal with trade in biotechnology products. Both the Protocol and the Sanitary and

Phytosanitary Agreement of the WTO address the ability of countries to restrict the importation of products to protect the environment from possible adverse effects. Both provide for the use of precautionary measures, and both require the use of scientific risk assessment. Both agreements establish that Parties may take a precautionary approach to restricting imports of living genetically modified organisms. But while a major effort has been made on the part of negotiators to avoid inconsistency in the treaties, doubts still remain.

Indeed, it is left unclear how the Biosafety Protocol and the WTO rules are to be read together and which would prevail in the event of an eventual dispute. In what is clearly negotiated language, there is a “savings clause” in the Protocol to “save” both agreements. While the “Protocol shall not be interpreted as implying a change in the rights and obligations of a party under any existing international agreement”, this “recital is not intended to subordinate this Protocol to other international agreements”. Bringing clarity to the relationship should not be left to dispute settlement.

A further consideration is that the United States – which accounts for three quarters of the world’s agricultural biotechnology crops – is not a member of the Protocol, and even if it chooses to abide by the rules, it is not bound by them. As the Protocol does not yet have a compliance mechanism, any dispute between WTO members would be dealt with under the WTO dispute settlement process.

Another example relates to the Convention on Biodiversity. It addresses the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. The CBD and the TRIPS Agreement both deal with subject

matters relating to genetic resources and intellectual property, and as mentioned earlier, some doubt that such goals are best met by the current intellectual property regime.⁵

Indeed, Ministers meeting in Doha instructed the Council for TRIPS to examine the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore. In undertaking this work, the TRIPS Council is to take fully into account the development dimension.

Thus, the important question is what policy conclusions can be drawn from all this.

First, it is of primary importance that rules relating to biotechnology products be developed in those institutions that have the expertise and mandate to do so. Negotiating consensus based rules and standards in broad based multilateral environment agreements is the preferred route for WTO members. These governments have on numerous occasions made it clear that they do not wish the WTO to be an environmental standards setting agency nor an agency that enforces them.

This is as true for the cross border trade in biotechnology products; as it is for access and benefit sharing of genetic resources: as it is for the labelling of food products. Negotiations on all these matters and more are underway in forums outside the WTO. Their successful conclusion is of vital importance to avoid additional non conventional trade issues gravitating to the WTO.

The need for assuring consistent and mutually supportive agreements is well recognised by WTO governments who launched as part of the Doha Development Round negotiations on the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements.

This brings me to my second conclusion. Much of what has been discussed above will be dealt with in the Doha Development Round. To state the obvious, the political will to carry these negotiations through to a successful conclusion is imperative. It seems fair to say that this political will is certainly lagging at the moment.

Third, while some regard the current provisions of the WTO to be sufficient and effective in dealing with circumstances surrounding biotechnology trade, others hold the view that biotechnology is sufficiently unique to require further clarification and/or elaboration of existing provisions in order that they may apply effectively in a predictable and transparent manner. In other words, more work is needed in identifying the issues and spelling out policy alternatives.

Here the work of the Institute of Advanced Studies at the United Nations University is of primary importance. In its Inter-linkages Program, the IAS has been examining the manner in which the various multilateral environment agreements can work in a coherent manner with other international treaties, including the rules of the WTO. In its more specific Bio-diplomacy Initiative the IAS has explored many of the issues that have been addressed in this talk.

As the U.N. Secretary General recently noted, this "multifaceted initiative represents a timely response to the crucial need for more research on and discussion of various aspects of biotechnology".

Similarly, the work conducted by UNCTAD on furthering the understanding of the relationship between science, technology and development is of primary importance. The focus of this work reflects the realization that the application of science and technology to development requires the ability to integrate the divergent disciplines that are needed to solve specific problems. Human and institutional capacity building in developing countries is critical if they are to fulfil their potential in this respect and UNCTAD is contributing to this goal in a significant manner.

Very finally, since social and ethical considerations are involved, developing a means to deal with these issues in the WTO should not be left to negotiators working according to briefs that reflect only national interests. What is at stake is maintaining the effective operation of the multilateral trading system while dealing with concerns that go far beyond conventional trade policy. The approach in such a situation should be investigated against the backdrop of the broader question of what does the international community want the role of the WTO in global governance to be in the coming decades. This larger question is critically important but does not appear to be addressed at a high level and in a coherent manner. In my view - it should be.

¹ The source of the problem lies in the assessment and management of risk and the ensuing formulation of policy. While risk assessment is the scientific determination of the relationship between cause and effect in situations where adverse effects can occur, the management of that risk entails establishing the necessary standards against which the risk can be managed appropriately.

² Similar concerns spill over to WTO rules relating to the controversy surrounding whether to label some biotech products and what form such labelling should take. The positive aspect of labelling schemes is that they provide consumers with information about the nature of goods and the manner in which they have been produced. As such, consumers can identify products that may carry risks for public health or the environment. But in the current discussion, views differ on both the legality and practicality of such labelling.

³ What is clear is that if differences in societal choice – not science – lead to accusations on the part of one major country that another is acting for purely protectionist motives, it is not a WTO dispute panel that is going to resolve this issue. Equally so for accusations of immoral behaviour in supposedly letting domestic preferences for biotechnology products interfere with food aid granted by another country.

⁴ Other areas provide examples of the relationship between TRIPS – trade agreement – and biotechnology. Food security is one. The concern here is that the prevailing policy framework directs the focus of seed company research to high value crops leading to decreased crop diversity. Also it is argued that the creation of trans-genetic plants with built-in resistance to herbicides could lead to ecological damage with the release of these crops into the nature. Another is that some life-saving drugs are the product of modern biotechnology, expensive, and out of reach for impoverished people. Is this inevitable as pharmaceutical companies recuperate rewards for past research, or are excessive profits derived from exclusive marketing rights that come with the ownership of patents?

⁵ As a consequence, an important question is whether the TRIPS Agreement assists in rewarding the holders of the biological resource in an equitable manner. Views differ widely on this point. For example, is the TRIPS definition of patents the most appropriate for the matter at hand? How can one define an invention and a beneficiary in local communities, given the need to prove novelty and non-obviousness. It is also difficult to establish when such knowledge was actually discovered and when it entered the public domain.

THE NEW PEASANTS REVOLT

*Thanks to corporate agriculture, family and peasant farmers across the world are becoming a dying species. Driven to penury, a number of them are forced to commit suicide. Yet, the fate of these small farmers, especially from the South, fails to attract sufficient attention in the international policy agenda. In the following article, Katharine Ainger, co-editor of New Internationalist magazine (www.newint.org), recounts her impressions after meeting the farmers fighting back. **More related information can be had at www.viacampesina.org***

Everything in a supermarket has a story to tell, if only we could find it out. The produce defies seasons, geography, wars, distance, nature. It is winter outside, but inside the supermarket golden-shell pineapples from Côte d'Ivoire, still small and green, bathe in humming halogen light. There is civil unrest in the Côte d'Ivoire, but it does not seem to have disrupted the flow of tropical fruit to the cold North. Next to them are strange, knobby bits of ginger dug from Chinese soil. Gala apples from France, bagged up and reduced to half price. Avocados from Israel and Chile. Pale tomatoes from the Canary Islands, where it is always warm, but the fruit must be picked green. 'Ready-to-go' meals fill the chiller cabinets. Here, wrapped in plastic, are small clusters of perfect baby corn and mange tout from plantations in Kenya. Here is cod, pulled up by trawler from the over-fished,

churning cold sea of the northeast Atlantic.

Though we can't hear their stories, what we choose to put in our supermarket baskets writes its own language upon our bodies and our moods, our families, our economies, our landscapes. It can mean life or death in some distant country whose name we can only vaguely discern printed on the packaging. We are, all of us, affected by trends in the global economy, in the most intimate and fundamental way possible - through our food.

Only rarely do these connections become visible, when the people who produce the food remind us of them. Those who work the countryside are a potent source of cultural identity, whether it's the *campesinos* of Mexico, the *gauchos* of Argentina, the *paysannes* of

France, Australian conkies, or the flat-capped Yorkshire farmer. Their images are used to market food to us, because we associate them with rural life, nature and rude good health. But the real people who produce our food are losing their livelihoods and leaving the land.

Over the past two years British dairy farmers, in their grief and anger over plummeting prices, have blockaded supermarkets up and down the country, spilled their milk, boycotted suppliers.

Why blockade the supermarkets? The average price British farmers receive for their milk is the lowest for 30 years. The bargaining power of the supermarkets is so great that prices for farmers are going ever downwards. In 2000, supermarket giant Tesco introduced international 'reverse' auctions for its suppliers all over

the world. They were asked to bid against each other until Tesco got the lowest price.

Supermarkets blame the consumer for wanting 'cheap food' -- yet 50 years ago farmers in Europe and North America received between 45 and 60 per cent of the money that consumers spent on food. Today that proportion has dropped to just 7 per cent in Britain and 3.5 per cent in the US.¹

Even that ultimate symbol of rugged individualism, the cowboy, is an endangered species. Most of the ranchers of the Great Plains of Nebraska are permanently broke, mortgaging or selling off their land and cattle to survive. The cowboy is riding into the final sunset as the Great Plains become steadily depopulated.

The details are specific to each country but the broad trends are international: the crisis in farming is global.

The six founding countries of Europe's Common Agricultural Policy had 22 million farmers in 1957; today that number has fallen to 7 million. Just 20 per cent of the European Union's wealthiest and largest farmers get 80 per cent of EU subsidies. Canada lost three-quarters of its farmers between 1941 and 1996 and the decline continues. In 1935 there were 6.8 million working farmers in the US; today the number is under 1.9 million - less than the total US prison population.

Suicide is now the leading cause of death among US farmers, occurring at a rate three times higher than in the general population. In Britain farmers are taking their own lives at a rate of one a week.²

In poorer countries the situation is even worse. Half of the world's people still make their living from the land - and it is they who feed the

majority of the world's poorest people. In South Asia and sub-Saharan Africa more than 70 per cent of the population makes a living from the land. Agriculture counts, on average, for half of total economic activity.

In the Philippines the number of farm households in the corn-producing region of Mindanao is set to fall by half. Between 1985 and 1995 the number of people employed in agriculture in Brazil fell from 23 million to 18 million. In China an estimated 400 million farmers are in danger of losing their livelihoods entirely. Everywhere small-scale farmers are being 'disappeared'.

All eaten up

Why is this happening? Somebody, somewhere, must be benefiting. The answer is not hard to discover. It lies not in the soil, but inside the corporations which have become known collectively as 'agribusiness'. They traverse the planet buying at the lowest possible price, putting every farmer in direct competition with every other farmer. While the price of crops has been pushed down - often even below the cost of production - the prices of inputs such as seed, fertilizers and pesticides have gone up.

Control of the 'food-chain' is being concentrated in ever-fewer hands. According to Bill Hefferman, rural sociologist at the University of Missouri, in some cases there is 'seamless and fully integrated control of the food system from gene to supermarket shelf'.³ When the two giant corporations Monsanto and Cargill went into partnership they controlled seed, fertilizer, pesticides, farm finance, grain collection, grain processing, livestock-feed processing, livestock production and slaughtering, as well as several processed-food brands. This system, developed in the US,

is being exported to other countries in the name of globalization.

This level of control is one of the reasons why genetically modified (GM) seeds are of such concern. They give agribusiness yet more weapons with which to enforce total dependency on their patented seeds. Some of them require own-brand herbicides and even own-brand 'trigger' chemicals (known as 'traitor' technology) that the farmer has to apply for before the seed will germinate.

This is the secret of the disappearance of the family farmer in the North - and the peasantry in the South. To disappear them, aside from killing them, you must turn them into vulnerable workers on an assembly line, without control over their own operations, and obliged to corporations.

Agribusiness writes the rules of international trade. Cargill was largely responsible for the Agreement on Agriculture at the World Trade Organization (WTO), which liberalizes the global market in agricultural goods. Farmers, particularly in poor countries, find it impossible to compete with cheap imports. One James Enyart of Monsanto said of the WTO's 'intellectual property' agreement (known as 'TRIPS') which makes its ownership of seeds and genetic material possible worldwide: 'Industry has identified a major problem in international trade. It crafted a solution, reduced it to a concrete proposal and sold it to our own and other governments.'

Why does it matter that small, 'inefficient' producers are being eradicated by globalized, corporate agriculture? Free-trade theory is based on the idea that countries should specialize, produce the things that they make best and buy in everything else. But, as Kevan Bundell from Christian Aid says: 'It makes little sense for poor countries

or poor farmers to put themselves at more risk if they have to rely on the efficient functioning of markets which all too often fail or don't exist.⁴

How 'efficient' is a system of agriculture that ignores ('externalizes') the huge costs of removing chemical contamination from water or losing genetic diversity? How 'wholesome' is it to create new diseases in animals and antibiotic resistance in people? How 'cheap' is the expense of public subsidies to private agribusiness, of global transport or social breakdown in rural areas?

Prevailing free-market thinking asks why we should provide support just to keep people in a state of 'backwardness' and rural poverty. But experience shows us that when these people lose their rural livelihoods, only a few will find better jobs in the city. Many will end up in enormous and growing urban slums.

'The future for peasant incomes and employment is grim,' says Chen Xiwen, deputy director of the Chinese State Council's research centre. According to Chen, in 2001 over 88 million workers migrated from rural to urban areas in China, most of them employed in 'dirty, hard, dangerous and unsafe conditions'.⁵

The question is not whether we have any right to condemn people to the difficult life of a poor farmer - an accusation often thrown at those who oppose the global-trade regime and the food cartel that runs it. The real question is whether vulnerable farmers themselves have meaningful choices. They need an international voice for their own priorities.

Let them eat trade

Nettie Webb, a Canadian farmer explains: 'The difficulty for us, as farming people, is that we are rooted

in the places where we live and grow our food. The other side, the corporate world, is globally mobile.'

To put it another way, global-trade rules might be fundamentally transforming agriculture, but as one sceptic asked: 'can one envision a coalition of Belgian, Dutch, French, Italian, Uruguayan, Brazilian and New Zealand farmers marching on a GATT (WTO) meeting in Punta del Este? And what could they demand to benefit them all, since they are all in competition with one another?'⁶

In fact Via Campesina has been marching on every WTO meeting from 1994 onwards. 'We will not be intimidated. We will not be "disappeared",' they have declared. This global alliance of small and family farmers, peasants, landless and indigenous people, women and rural labourers, has a membership of millions - the vast majority from poor countries - and they're putting an alternative agricultural paradigm on the map.

It's based on the idea of 'food sovereignty'. It is, they say, 'the RIGHT of peoples, communities and countries to define their own agricultural, labour, fishing, food and land policies which are ecologically, socially, economically and culturally appropriate to their unique circumstances.'

They believe food is a human right, not a commodity, and that their job - the production of food - is fundamental to all human existence. This attitude is summed up by a food co-op member's retort to Brazilian President Cardoso when he said that agriculture had to submit to the law of the market: 'Very well, Mr President. When Brazil no longer needs food, then you can let agriculture go bankrupt.'⁷

The farmers of Via Campesina argue that nothing as important as food should be ruled by the WTO.

They've been leading the campaign to take agriculture out of its remit entirely. This does not mean that they are 'anti-trade'. They believe in trading goods which a country cannot produce itself. Once a country has supported its own food needs and production it should be free to trade the surplus.

I spent time with Via Campesina at the 2002 World Social Forum in Porto Alegre, Brazil, where they explained their vision in more depth. I'm in the courtyard of the Convent del Capuchino. There are mango and papaya trees hung with unripe green fruit. Via Campesina delegates - people of few words - sit on benches, sip sweet coffee and contemplate.

José Bocquisso Jr explains the views of the National Peasants' Union in Mozambique. 'Mozambique was one of the largest cashew-nut processors in the world,' he says. 'But because of the IMF the industry was privatized and the processing plants were closed... People should concentrate on producing food for themselves, not products for export... If we produce a lot of cotton the price ends up being below the cost of production, and people are stranded with piles of cotton, but with no food and no money. In our organization we concentrate on producing food, we encourage our members first to provide for their daily needs. Then it doesn't matter so much if they don't have money, because they are secure in food and have guaranteed the ability to feed their families.' His group is part of the expanding African contingent in Via Campesina. 'It is very strengthening to feel part of a global movement. World powers have to be fought globally.'

Via Campesina is not anti-technology. Its vision is, however, based on a model of agriculture built from the ground up, in which farmers' knowledge has a

significant place. Indeed, all Via Campesina's arguments about food and farming - whether GMOs, access to land or markets - come down to one central issue: control.

Indra Lubis, part of a coalition of 13 Indonesian peasant unions with 900,000 members, explains that rejection of genetically modified seed and pesticides is about self-determination: 'With Monsanto, who have planted GM cotton in south Sulawesi, we'll have to depend on them for seed. They want to control cotton and food production. As peasants, we'll be made dependent on multinational corporations. But we are independent when we develop our own agriculture. We use our own productive system, with no chemical fertilizer or herbicides. We use local seeds and local fertilizer. In Indonesia we have so many varieties of seed. It is a deep part of our culture.'

Seventy per cent of the world's farmers are women - most of the people in this courtyard are men. Rosalva Gutierrez, from the Belize Association of Producer Organizations, tells me: 'It is always the women who take the hardest part as farmers, mothers, wives. We have many strong women but they have been abused for so many years, women's self-esteem is very low. So we give workshops and training... I'm co-ordinator of the women's project and on the international co-ordination of Via Campesina - I try to ensure that what Via Campesina says on paper

about gender equality becomes reality!'

And she tells me: 'We don't see farmers as being from different countries. Farmers everywhere understand the same point.'

Via Campesina argues that food production has a unique role to play in rural livelihoods, health, ecology and culture.

Kanya Pankiti, a peasant from the south of Thailand - on her first trip out of the country - says the way her people grow food preserves the forest, the watershed and the soil. She thinks the Brazilians aren't growing enough trees. 'The way Brazilians do agriculture now will cause soil erosion,' she worries, picking and nibbling leaves she recognizes from home - it has never occurred to Brazilians to cook with them.

Kanya knows a lot about trees. She says: 'The Thai forest department doesn't believe that people can live in the forest and preserve it. The reality is, we have lived in the forest for a hundred years. It is not the villagers who are destroying the forest, but the loggers clear-cutting. When the forest is clear-cut the land becomes less fertile.' Her house is outside a new National Park zone, her land inside it, and they want to clear her out. 'When they declare a National Park,' she says, 'they sit in an air-conditioned office and look at a map.'

What does she think of the World Social Forum? She's going back to tell her village 'that they are not alone in the world, struggling for land, and we can link up with those in other countries'.

For anyone who eats, the question of who controls the food chain - farmers, or an ever-more powerful cartel of food corporations - is no less pertinent than it is for Indra, Kanya or José. At the very same time as consumers in the rich world are objecting more than ever to factory farming, to the use of antibiotics in livestock, to pesticide residues in food, to the loss of biodiversity and to food scares such as BSE, this very same model is being set up for replication around the world, often disguised as 'development'.

Mario Pizano, a member of the Confederación Campesino del Suerto in Chile, joins the conversation. 'The big companies are buying up all the land,' he complains. 'With contract farming, they tell us: "We'll buy your food only if you buy the chemicals you need from us." They give us chemicals that are forbidden in the US. Then we have to give them a section of our crop. If we can't, then they take our land.'

But he, and millions like him, refuse to become serfs on their own land. As we part, he takes off his green cap, emblazoned with the name of his organization, and gives it to me. 'This organization is part of me,' he says.

¹ 'What's Wrong with Supermarkets', Corporate Watch, 2002.

² Bringing the Food Economy Home, Norberg-Hodge, Merrifield, Gorelick, Zed Books 2002.

³ 'Where have all the farmers gone?', Brian Halweil, WorldWatch 2000.

⁴ 'Forgotten Farmers: Small farmers, trade, and sustainable agriculture', Kevan Bundell, Christian Aid 2002.

⁵ 'The Forgotten 800 Million: How Rural Life is Dying in the New China', Guardian Newspapers, 18/10/2002.

⁶ 'The Via Campesina: Consolidating an International Peasant and Farm Movement', Annette Aurelie Desmarais, Journal of Peasant Studies, January 2002.

⁷ Cutting the Wire, Branford, Rocha, Latin America Bureau 2002.

CONTAMINATING CANADA'S SEED SUPPLY

The following article has been taken from the April, 2003 issue of Seedling, a publication of the Barcelona-based Genetic Resources Action International (GRAIN).

In Canada, the privatisation of farmer's seeds continues to advance at a breathtaking pace. Canadian farmers have fewer and fewer varieties of seed to choose from, fewer places to buy it from and fewer rights to produce their own seed. Now they face another threat: the contamination of the entire seed supply with genetically modified seed.

Plant breeding in Canada is in the midst of a radical and rapid transformation. The previous framework of plant breeding, based on a collective process of information and seed exchange, farmer participation and seed saving, and a mandate to maximise the public good, is being replaced by a framework of exclusive property rights and private profit. Public breeding programmes have been gutted. Farmer seed saving and plant breeding practices have been criminalised. The Canadian seed supply, built on generations of farmer and public sector plant breeding, is being taken over by a handful of transnational seed and pesticide corporations.

The same processes are underway in other countries, but they are particularly advanced in Canada, where the government has pursued a national biotechnology strategy since the early 1980s and where genetically modified (GM) crops already occupy a considerable portion of agricultural land. Sixty-five percent of Canada's oilseed rape (canola) crop was genetically engineered for herbicide resistance in 2002. In the same year, GM crops were grown on 3.5 million hectares in Canada, up 9% from the previous year. A close look at the situation in Canada provides a chilling example of the implications of the transnational

seed industry's agenda for farmers in the rest of the world. What is new to the picture is industry's role in deliberately contaminating the seed supply.

Breeding for the common good

There are two characteristics of Canadian agriculture that define plant breeding in the country. First, few of Canada's major crops are native to North America. Indigenous peoples in certain areas of Canada had highly developed agricultural systems before the Europeans arrived, growing crops such as squash, sunflower, beans, and maize. Some of these indigenous varieties were grown on the farms of European settlers into the 20th century. But, by and large, Canada's current agricultural biodiversity is relatively new and based on varieties from abroad. Canada's short-season soybean crop is based on farmers' varieties from the Sakhalin Islands of northern Japan. Nearly every variety of wheat grown in Canada is a descendant of Marquis wheat – a cross of a farmer's variety from the Ukraine with a farmer's variety from India. Canola (a kind of oilseed rape with a particular oil quality) was developed by Canadian public breeders working with descendants of a rapeseed variety brought by a farmer from Poland in 1927.

Second, few varieties grown in other parts of the world are adaptable to Canada's unique ecological conditions. The big breakthrough with wheat occurred when a Canadian farmer introduced a variety that he received from a friend in Glasgow, who collected the seeds from a ship sailing from Poland carrying wheat from the Ukraine. The Canadian gov-

ernment undertook extensive collection missions to find a better variety, but found none. So public breeders turned to difficult and time-consuming crosses to try and improve Canadian wheat.

Canada does not have ideal seed markets for the transnational seed industry. It takes a lot of breeding work to develop varieties for Canada's relatively small markets. From a seed industry standpoint, the returns on investment for most crops are inadequate. This is not the case for the public sector, where returns are measured according to the public good the investment creates. Farmers, consumers, and the downstream food and feed industry in particular all benefit from plant breeding and it has always been carried out with the larger objective of national economic development.

Traditionally, crop development has been an informal partnership between public breeders, farmers and government. In the early 1980s, the public sector still accounted for 100% of formal plant breeding for cereals and oilseeds. The government provided the financial support and farmers were responsible for the multiplication and diffusion of public varieties and seed saving. Public breeders distributed their seeds to certain farmers to carry out the first two generations of multiplication. The seed was then distributed to more farmers, who multiplied it into registered and then certified seed. The certified seed was then sold to farmers, who continued to take care of the seed by saving it for themselves, or selling it to, or sharing it with their neighbours.

Farm-saved seed has traditionally provided the bulk of

Canada's seed supply. In 1978, there was only enough certified seed available for 14% of the seeded area for wheat, 31% for barley, and 30% for oats. With most crops, farmers only bought seed when they felt that the quality of their seed was deteriorating. Farmers might save their seeds for upwards of six generations without any need for new certified seed, since they did an excellent job of maintaining the quality of their seed from year to year. One study in the province of Alberta in 1980 found that 60% of the farmer-saved seed surveyed was equal to the highest quality seed on the market. The public good of farm-saved seed is rarely considered, but when farmers save seed they take the cost of producing, distributing and marketing new seed out of the production process. This translates into a saving of millions of dollars every year.

In this traditional partnership the returns on plant breeding were not measured by seed sales but by the overall contribution that these made to agriculture and the food system. This breeding framework has always made sense for Canadian agriculture. But in the 1970s and 1980s, the Canadian government, caught up in the hype of biotechnology and the transnational chemical industry's decision to invest in the seed market, decided to reorient policy. Establishing a private seed and agricultural biotechnology industry became its new priority, and conflicts with the traditional plant breeding framework became inevitable.

A sharp change in direction

The private seed industry could not make a profit in Canada on its own. The Canadian government provided hundreds of millions of dollars to the seed industry in direct subsidies, tax credits and matching public-private partnership grants. It also introduced or modified laws

and regulations to give the seed industry more control over the seed supply and to curtail or eliminate the participation of farmers and public breeders. These interventions were designed to eliminate public goods, like seed saving, for the sake of private profit.

In just twenty years, the seed industry and the government have reduced the old partnership to tatters. The foundations of the old system – the free exchange of germplasm and the active participation of farmers in the seed supply – are on the verge of disappearing. The transformation was deliberate, but the ways through which it took place and continues to operate are not easy to decipher. The transnational seed industry cleverly disguised its agenda to avoid opposition. This article aims to demystify one of the transnational seed industry's efforts to advance its interests: the deliberate genetic contamination of the seed supply.

Cashing in on contamination

Most major food crops in Canada are self-pollinating and highly stable. Farmers can save seeds from year to year without any serious impact on quality or performance. Until recently, seed "purity" was simply a technical matter of making sure that seeds were properly selected, cleaned, and stored. Genetic "contamination" was a meaningless concept.

With the introduction of GM crops, genetic contamination has become a major concern. Consumers in Europe and Japan, Canada's most important agricultural export markets, refuse to eat GM foods and Canadian farmers growing GM crops have lost markets. So have conventional farmers because the seed industry has deliberately contaminated conventional and organic grain supplies. It has done this by

introducing GM varieties into a system where contamination is bound to occur, either by mixing during grain handling, cross-pollination, or the persistence of GM crops in fields. This is particularly the case with oilseed rape, which has the largest area planted to GM plants in Canada. Unwanted GM oilseed rape is turning up all over the place in western Canada. According to Robert Stevenson, a Saskatchewan farmer who has never planted GM oilseed rape: "It's close to being as thick as a crop. Crop insurance considers nine plants per square metre to be a viable canola crop. Without even trying I have four [GM canola] plants per square metre. This for me is a new weed, and it's here in very significant numbers". The widespread contamination creates indirect problems for farmers as well. Monsanto, the leading GM oilseed rape company in Canada, claims that all oilseed rape plants in farmer's fields containing their patented Roundup Ready gene belong to them, even if plants arrived in the fields accidentally or the gene was transferred through cross-pollination. The Federal Court of Canada recently upheld Monsanto's interpretation in a case between the company and Percy Schmeiser, an oilseed rape farmer from Saskatchewan (see box).

Contamination is not only happening in farmers' fields. A number of studies show that the pedigreed oilseed rape seed supply is deeply contaminated. Researchers at the University of Manitoba conducted a survey of 27 pedigree seed lots of oilseed rape in 2002. Of the 27 seed lots, had contamination levels above 0.25% and three seed lots had glyphosate resistance contamination levels in excess of 2.0%. Oilseed rape breeder Keith Downey suspects that, "There are varieties of certified seed out there, in which part of the level of contamination is coming

right from the breeders' seed." Walter Fehr, an agronomist and director of the Office of Biotechnology at Iowa State University says the same is true of other crops, such as soybeans and maize. If the breeder seed supply is contaminated then the whole system is contaminated and it will be hard to find any fields that can be considered GM free. A recent report suggests that even Canadian wheat (the GM version of which has not yet been approved) may be contaminated, since researchers were testing Roundup Ready wheat at a national experimental station alongside plots of wheat destined for commercial seed growers. The extent of the penetration of contaminated seed into the seed supply is now so deep that segregating GM from non-GM seed will not help at this point.

Only upstream mechanisms, such as regulation, can now prevent contamination. One tool that should be able to help is Canada's varietal registration system, which was set up to protect farmers from the introduction of varieties with negative impacts. All new agricultural plant varieties are tested for agronomic performance, disease resistance and end-use quality and only those varieties that are at least equal to the best varieties available are allowed on the market. But the varietal registration system has its limitations. Committees of "experts" -- composed primarily of formal plant breeders and scientists, commercial seed growers and commodity group representatives - make the final decisions. The committees are not democratic and the varietal registration system is biased towards industrial agricultural systems (as opposed to ecological agriculture). Nor is the system designed to assess GM varieties.

When the first GM varieties came through the registration

system, the evaluation committee took the unprecedented step of awarding bonus points for herbicide resistance (the varieties probably would not have been approved otherwise). Now that the negative implications of GM crops are apparent, the committees should be able to deduct points from GM varieties where there are negative consequences for farmers. But instead the Canadian government, in close collaboration with the seed industry, is moving rapidly in the opposite direction. It is using the introduction of GM crops and the privatisation of plant breeding as a pretext to strip the varietal registration system of its capacity to fulfil its mandate.

Agriculture and Agri-food Canada (AAFC), Canada's department of agriculture, has put forward a proposal to overhaul the varietal registration system. The number of recommending committees will be cut from 20 to six. Certain crops -- wheat, oilseed rape, barley, rye, triticale, oat, mustard, pea and sunflower -- will continue to be tested for agronomic merit, but the criteria will include only quality and/or disease resistance. Only one year of performance information will be required, instead of three. This appears to be a token gesture to appease critics because, as Rob Graf, a research scientist with AAFC, suggests: "For yield and some other agronomic traits, environment has tremendous influence, which means that one year of data cannot provide a reliable prediction of long-term performance". Kevin Falk, another AAFC breeder, says that, "You need four years, maybe more" to measure yield.

The government and the seed industry have no interest in strengthening the current regulatory system to deal with genetic contamination. They have a very different system in mind for

segregation and regulation. Once undressed, what this "identity-preservation" system really is a way to shift the responsibility for genetic contamination on to farmers, while boosting seed sales.

The term "*Identity Preservation*" is everywhere in Canadian government circles these days. It's one of those catchy labels that fit in well with the current discourse of globalisation: where the future of agriculture is seen as an integrated '*field-to-fork*' system responding to an increasing number of '*value-added*' niche markets. The claim is that an Identity Preservation system will "preserve the identity of specific lots of grain from farm to market" and give Canada a "*significant competitive advantage*". Ironically, the system is actually set up to do the opposite, since instead of preserving the identity of Canadian seed, it will occlude it, thereby stripping Canadian farmers of their competitive advantage.

There is a larger story behind the rhetoric. The Canadian prairies already have a system to protect Canada's competitive advantage. The current Kernel Visual Distinguishability and variety registration systems are designed to work together to maintain the quality of Canadian exports and guarantee farmers premium prices on the world market. These systems are the cornerstones of the Canadian Wheat Board, a farmer-controlled organisation that markets wheat and barley grown by western Canadian farmers. The actual problem for farmers is not with securing competitive advantage but with preventing the competitive disadvantages caused by the introduction of GM varieties and low-quality varieties, which the proposed system will exacerbate. The Identity Preservation scheme is really a way to allow more varieties on the market -- varieties that are rejected by export markets or do not live up to the standards of the

current system. It is a way to break apart the Canadian Wheat Board to let big players like Cargill and Archer Daniels Midland Company take over the grain trade and Monsanto and Syngenta take over the seed supply. It is also a way to shift the costs and responsibility of contamination onto farmers growing non-GM crops. As pointed out by Bill Toews, a wheat farmer from southern Manitoba: "What [the Identity Preservation system is] trying to do is introduce a lower-value variety [the GM variety] into a stream that has a relatively higher value". This, says Toews, will "add a segregation cost which will be shifted from the GM crop to the non-GM crop, because it is a higher-value crop that we are trying to protect. Why [as farmers] do we want to do that?"

Holding farmers to ransom

There is another important element in the larger "Identity Preservation" agenda, which revolves around the seed industry's scheme for an "Affidavit System". This proposed system requires farmers to sign a written guarantee testifying to the variety of their crop when they drop their harvests off at grain elevators. The assumption here is that grain can be segregated by maintaining the "identity" of the variety through the grain handling system. But let's be clear. This is not an effective system for preventing genetic contamination. The seed supply is contaminated, so knowing the variety is no indication of genetic purity. This is a trap to prevent farmers from saving seed.

The seed industry is well aware that, under the Canada Seeds Act, farmers can only declare the variety name of their crops if the crops are grown with pedigreed seed. According to a January 2003 position paper by the Canadian Seed Trade Association (CSTA) on the Affidavit System: "A legal

opinion obtained by the CSTA confirms the reality that only crops planted with pedigreed seed can be identified by a variety name in the grain handling and processing system . . . We recognise the concerns of industry stakeholders with mandating the use of certified seed. Where products are to be sold by "class", the CSTA supports a middle ground position of not requiring the crop to have been planted with certified seed. However, the grower must be able to prove the purchase of certified seed of that variety in recent years. In cases where the grain handler or processor is claiming the grain is identity-preserved the requirement for the use of pedigreed seed must be complete."

It's hard to overstate the arrogance in this statement. First, grain handlers have been sorting farmer-saved seed by class without a problem since the classification system began in Canada. Why should farmers all of a sudden have to prove the use of certified seed in recent years? Second, as every farmer or decent plant scientist knows, you do not need to use certified seed to preserve the genetic "identity" of a variety. Farmer-saved seed can cause agronomic problems if the seed is not properly handled, but this will not affect its quality for the end-user – unless, of course, the crop is at risk of contamination from GM crops. But, the seed industry, not the farmer is responsible for this. It is mighty unfair to penalise farmers by making them buy seed every year for a problem created by those selling seed. This is especially true when the pedigreed seed supply is as seriously contaminated as farmer's fields, a problem that the seed industry itself admits to.

The CSTA's suggestions would be laughable if it were not for the fact that they are in the process of being implemented. AAFC supports the creation of an identity-

preservation system and it has turned responsibility for setting it up over to the Canadian Seed Institute, a "not-for-profit, industry-led organisation" founded by the CSTA and the Canadian Seed Growers Association and managed by a board of industry representatives. In November 2001, AAFC Minister Lyle Vanclief announced the allocation of \$1.2 million to the Canadian Seed Institute to help develop its Market Delivery Value Assurance Program. According to the AAFC announcement, the program will "help develop standards and audit procedures, as well as launch a research program to verify grain purity, develop internet-based tracking system requiring key information during each step of the handling process, and create a national third-party certification body." This is yet another instance of public money being used for private profit.

These developments are really bad news for farmers. They are under attack from all sides. The combination of patents, plant breeders' rights, grower's contracts, and the looming changes to the registration and classification system leaves them with no room to do plant breeding, save seeds or exercise influence over formal plant breeding programs. More and more, the new varieties that come to market will reflect a set of interests that has nothing to do with them. "Choice" will be an empty word for farmers. All the benefits from this transformation will go to a small number of transnational corporations, even as the new varieties they produce will continue to be based on the accumulated agricultural biodiversity of farmers, in Canada and abroad, and the preceding investment in plant breeding by the public sector. The interests of the Canadian public, not just the interests of farmers, are being sold down the river by its very own government.

People take back the seed supply

The seed industry and the Canadian government have cornered the public. Some people have tried to take refuge in the organic option, but the combination of laws and regulations that support the seed industry, the deliberate GM contamination, and the dismantling of public sector research programs are quickly turning this option into a dead end. The only possibility left is to fight back.

Farmers are leading the charge. Organic farmers in Saskatchewan, spurred by the GM contamination of virtually all oilseed rape and the looming introduction of Roundup Ready wheat, formed the Organic Agriculture Protection Fund in June 2001. The Fund is pursuing a class-action lawsuit against Monsanto and Aventis for making it impossible to grow organic oilseed rape and has initiated a nationwide campaign, with the National

Farmers Union (NFU) and several other farmers' organisations and NGOs, to stop the introduction of GM wheat. Various farmer-led initiatives to prevent genetic contamination are popping up elsewhere in Canada.

There are also signs of unrest in the public sector breeding community. Several breeders have spoken out publicly against intellectual property rights and the dismantling of the varietal registration system and public breeding programs. Others are proposing alternative directions for public programmes. Frustrated by the increasing scope of intellectual property rights, Tom Michaels, the Associate Dean of the Ontario Agricultural College, is working on a proposal for a General Public Licensing system for plant varieties that would keep plant varieties and their descendants freely available for use in any breeding program.

These various voices need to come together. There is no reason to believe that the current trend cannot be stopped. The industry lobby is much weaker than its appearance suggests. It is essentially a small elite of scientists and business people, heavily tied to the transnational biotech industry, who have managed to co-opt government for their own purposes. They are deeply dependent on government support and intervention, but do not have the confidence of a sceptical Canadian public. In order to stop the seed industry's reckless and deliberate contamination of Canadian agriculture and its take-over of the seed supply, people have to take government back into their own hands. This is no small task since the window of opportunity is growing smaller by the day, but it is by no means unachievable.

UNAFFORDABLE MEDICINES - NEW PRICING MANUAL

Geneva, 20 May, (DNS) — The World Health Organization (WHO) and Health Action International (HAI) announced the release of Medicine Prices, a pricing manual outlining how to collect and analyze data for thirty widely-used medicines.

Medicine prices vary between countries and regions and historically, relatively little has been known about how those prices are determined.

"In developing countries, poverty places medicines out of reach of one-third of the population," said Margaret Ewen from HAI Europe. "Better information on prices, price differences and the factors contributing a medicine's final cost are essential if governments and other medicine purchasers are to find

ways of making medicines more affordable."

The manual proposes a new price survey methodology, suggests how to analyse price data, and identifies broad policy options to achieve more affordable prices, including comparisons of innovator brand products with their generic equivalents.

Before publication, the survey methodology was tested over two years in Armenia, Brazil, Cameroon, Ghana, Kenya, Peru, Philippines, South Africa and Sri Lanka. These are a few of the findings:

- A one dose treatment of innovator brand ciprofloxacin for gonorrhoea in Armenia and Kenya requires 3 days' wages and 1 hour in Sri Lanka.

- For the same treatment, if in Armenia you use the generic equivalent rather than the innovator brand, you save 2.5 days pay.
- In Kenya, the brand premium across 10 medicines is over 400%, primarily because generic prices are very low.
- The consumer price of innovator brand nifedipine 10mg in private pharmacies is about six times higher in South Africa than in Brazil.
- In South Africa, all of the private retail pharmacies surveyed had innovator brand omeprazole available but only 50% had the most sold generic.

MONSANTO WINS SPECIES-WIDE PATENT

The long-awaited case in the European Patent Office against a 'broad species' patent claimed by the gene-giant Monsanto finally heard on 6 May, 2003, after a silence of nine years! The verdict – in favour of Monsanto - shocked many. It would have surprised Monsanto too, had it not bought over the original patent holder 'Agracetus' two years into the trial. Reproduced below is the reaction to the ruling by the Canada-based ETC Group (formerly RAFI), which calls the ruling 'patently wrong,' passed after 'delays, denial, and double standards.' Although the EPO tribunal decisively ruled in favour of Monsanto, the panel will not release its written judgment for several more weeks, says the ETC Group. Notable recent developments related to GMOs include: the blocking by EU panel of genetic exports without the consent of importing country; Switzerland's lower parliamentary house approval of a five year moratorium on the farming of genetically modified crops by inserting the ban into an agricultural funding bill; and the U.S. decision to file a case in the WTO against EU Moratorium – with other countries expressing support for this case by joining it as third parties being Australia, Chile, Colombia, El Salvador, Honduras, Mexico, New Zealand, Peru and Uruguay.

In a jaw-dropping affirmation of Monsanto's monopoly control over commodity crops, one of the world's most notorious patents for genetically engineered crops was yesterday upheld by the European Patent Office (EPO) in Munich - this despite a nine year battle by civil society (and industry) to have it revoked. European Patent No. 301,749, granted in March 1994, is an exceptionally broad "species patent" which grants gene giant Monsanto exclusive monopoly over all forms of genetically engineered soybean varieties and seeds - irrespective of the genes used or the transformation technique employed. The patent, attacked as immoral and technically invalid by food security advocates worldwide, was vigorously opposed by Monsanto itself until they purchased the original patent holder (Agracetus) in 1996, and switched sides to make the soybean species patent a major ingredient in its global recipe for crop monopoly.

Backburner: The case simmered on the EPO's backburner for an astonishing nine years before reaching the patent tribunal in Munich yesterday. The EPO took only ten hours (including coffee and cake breaks) to hear oral arguments and uphold Monsanto's monopoly. Monsanto did surrender one unsustainable claim in the patent (claim no. 25), which sought control beyond soybeans to other plants as well.

ETC Group, who maintained its opposition to the patent since first uncovering it nearly a decade ago, were present in Munich yesterday with expert legal counsel, UK barrister Daniel Alexander and patent attorney Tim Roberts. Other opponents included Greenpeace, activist Stefan Geene, Syngenta and Pioneer Hi-Bred (a subsidiary of DuPont).

ETC Group and other opponents expressed bitter disappointment at the outcome.

Same old recipe: "Monsanto has made overtures in the media to reinvent themselves as a gentler, humbler company," said Hope Shand, ETC Group Research Director, "But their behaviour in court showed that where it matters, Monsanto is still aggressively pursuing monopolistic control by any means available. Even more alarming is how readily the patent system rewards such behaviour, ignoring basic morality, and failing to encourage socially beneficial innovation. When ETC Group first challenged this patent we were primarily concerned about the threat to food security from the Gene Giants - today, nine years later, we find ourselves equally shocked and concerned about the threat to democracy from such an unresponsive patent system. It portends much larger patent problems to come with

nanotechnology and other emerging technologies."

"This is a thoroughly bad decision," said patent attorney Tim Roberts. "You would look far to find another patent in which such a small advance has justified such an enormous claim. It seems to have been reached by mechanically applying inappropriate precedent, while ignoring the fundamental principle of the patent system - the balance of rights between the innovator and society. If the Opposition Board's decision is correct in law, then the law needs to be changed," said Roberts.

SARS bars and Geene engineering: Monsanto began the proceedings in Munich with successful legal moves to deny some expert witnesses the right to speak; including Dr. Suman Sahai of the Gene Campaign who had been brought by Greenpeace from India to testify about the impact of the patent on food security. Most amazingly, soybean experts from China, the genetic homeland of soya, had already been barred from the EPO court because of SARS fears. Monsanto then proposed to the tribunal that ETC Group and long-time German campaigner Stefan Geene be disqualified from the hearing, claiming that Geene, despite being present in the courtroom, was a 'fictitious person'. Although Monsanto's request was denied, it set the tone for its strategy

throughout the day. Debate on ethical questions was largely marginalised by Monsanto and an unresponsive Tribunal.

Secret Recipe: Perhaps most astonishing was Monsanto's legal manoeuvring to sidestep its own evidence. In 1994 Monsanto gave unambiguous evidence in an opposition statement requesting that the patent be revoked. One of Monsanto's top scientists testified in 1994 that the genetic engineering process described in the patent was insufficient to allow someone skilled in the science to replicate the procedure -- a necessary criterion for patentability. Nevertheless Monsanto's lawyers successfully argued that the company should be allowed monopoly over any genetically engineered soybean seed and variety obtained through any and all modification processes.

Let them eat cake? "It's a bit like publishing a badly written cake recipe and then claiming ownership of any cakes baked by anybody using any recipe any time in the future," explained Jim Thomas, of ETC Group's Oxford office. "In fact, since acquiring Agracetus, Monsanto has already leveraged this patent as part of their strategy to grab as much of the cake as they can - seeking to control one of the world's most important food crops. Monsanto now controls 100% of the world's genetically engineered soybeans covering 36.5 million hectares in 2002 - that's over half of the world's total soybean area. It's hard to imagine a more blatant and dangerous monopoly."

Soy Berger King: According to Dr. Christoph Then, patent expert for Greenpeace, "This case is a clear signal that the European Patent Directive should be revoked. Europe needs new patent legislation that expressly prohibits patents on life." Dr. Then and Stefan Geene represented Greenpeace at the EPO tribunal yesterday.

Matter Monopolies: ETC Group also regards the maintenance of this patent as a dangerous precedent for other broad claims on new emerging technologies, in particular nanotechnology -- the atomic manipulation of matter to create new molecular forms. "This broad patent on Soybeans was allowed precisely because aggressive corporations and lax governments were pushing the boundaries in the early days of biotech, allowing exclusive monopoly patents on all biological products and processes," explained Shand. "Today, corporations are grabbing nano-patents on molecular products and processes, even the chemical elements that make up all of nature. With nanotech patents, 'Matter Moguls' threaten to control the fundamental building blocks of nature."

Recipe change: "We fear that the EPO decision on Monsanto's soybean patent gives comfort to those who want to establish ever wider legal claims - including matter monopolies," emphasized Jim Thomas. "Monsanto may have won an entire species but others are seeking to monopolise entire elements of nature. Atomic-level

manufacturing provides new opportunities for sweeping monopoly control over both living and non-living matter." With technologies converging at the nanoscale, ETC Group warns that efforts to oppose intellectual monopolies must not be limited to campaigns against the patenting of life. This issue will be discussed at an upcoming seminar for policy makers, civil society and the media in the European Parliament in Brussels on June 11th. "If the recipe is this bad we'll take it back to the cooks," Thomas concludes.

Seminar in European Parliament: Together with the European Greens, The Ecologist, Greenpeace, The Dag Hammarskjöld Foundation, Genewatch UK, Clean Production Action and a cross-party group of MEP's, ETC Group will hold a seminar on nanotechnology in the European Parliament in Brussels on June 11, 2003. Led by international experts, the seminar will look at both the issues related to nanotech and intellectual property as well as societal and safety questions with a view to consider appropriate steps for government regulation. Speakers include physicist Dr. Vandana Shiva and toxicologist Dr. Vyvyan Howard. The seminar will be followed on June 12 by a discussion among civil society organisations in Europe on strategies to address the issues involved in nanotechnology. For further information please see ETC Group's website: www.etcgroup.org or contact jim@etcgroup.org.

AUSTRALIA REJECTS GE FOOD CROPS

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side North America and Argentina.

"Australia currently only allows the commercial planting of GE cotton and GE carnations", Mr Hepburn said. "However, canola is proposed as the first commercially grown GE

food crop in this country".

Greenpeace says that consumer rejection of GE foods in Australia continues to grow. "Studies consistently show that up to 70% of Australians are concerned about eating GE

food", Mr Hepburn said. "And many major Australian food companies have responded by removing GE from their supply chains".

DUMPING ON FARMERS

One of the most serious issues affecting agriculture worldwide - dumping of agricultural produce at cheap prices – still fails to be mainstreamed in the negotiations on agriculture in the World Trade Organization. The following article by Ben Lilliston, the Communications Coordinator at the U.S.-based Institute for Agriculture and Trade Policy (IATP), captures the problem.

Countries around the world are grumbling about agriculture at the World Trade Organization (WTO). On March 31st, the 144 WTO member countries missed an important negotiating deadline to develop new agriculture trade rules. Behind the bickering over tariffs and subsidies - there is a festering uneasiness that the agriculture trade system is seriously broken. After nearly a decade of super-charged, globalized trade, farmers around the world - from the Philippines to the U.S. - have been crushed by lower prices. The farm crisis has gone global, and many are looking for answers before taking another step forward.

A recent analysis of major agriculture exports from the U.S. provides some clues on how profoundly this system has failed. The U.S. now routinely sells five of its major agricultural commodities on international markets at a price below the cost of production. This practice, known as dumping, causes enormous damage not only to farmers in other countries but to U.S. farmers as well. The cost of production for a bushel of wheat in 2001 was \$6.24, while the export price was only \$3.50 - a 44 percent level of dumping. In 2001, corn was dumped at 33 percent, soybeans 29 percent, cotton 57 percent, and rice at 22 percent.

It's not hard to figure out what dumping from the U.S. does to farmers in other countries. These below-cost imports drive developing country farmers out of their local markets. This is happening around

the world, in places as far apart as Mexico and Burkina Faso. And developing country farmers who rely on exports cannot compete with dumped commodities from the U.S. in the global marketplace.

But first to pay the price of dumping are U.S. farmers. Dumping is a product of a non-competitive domestic market. Farmers sell at a loss and must turn to the government for help. The problem gets worse as cheap U.S. commodity prices drive down world prices creating a vicious cycle that propels still lower prices at the U.S. farmgate. Every cent that a commodity is sold below the cost of production is a cent taken out of our farmers' pockets.

Remarkably, dumping from the U.S. is no accident. It's part of a calculated policy, driven by agribusiness and government bureaucrats, to drive down the price of commodities. This policy approach, vigorously enacted in the 1996 U.S. Farm bill and through trade negotiations at the WTO, strips away tools designed to guarantee farmers a fair price for their crop - like supply management, strong marketplace competition, and non-recourse loans. The justification is theoretical: that record-low prices will open up new export markets for US commodities - which will in turn drive a revitalized farm sector.

This approach has been an unqualified success in driving farm prices down. But export markets

remain flat. In fact, countries like Brazil, Argentina and China are grabbing a larger portion of the export market. Of course, with lower prices, come lower farm incomes. Many U.S. family farmers have been forced to leave farming. The declining farm sector has caused a negative ripple throughout rural communities. We've seen population declines and the closing of schools and hospitals. This same pattern is happening all over the world - from the rural Midwest to rural China.

It's no mystery who has benefited from the cheap commodity system. Multinational agribusiness companies have seen their profits skyrocket over the past decade. Archer Daniels Midland idles a soybean plant in Kansas while it builds a new plant in China. Cargill's new facilities in Brazil will help Brazilian soybean farmers compete with U.S. soybean farmers. Cheap commodities, no matter where in the world they are grown, mean cheaper production costs and higher profits for agribusiness giants.

At the WTO, the U.S. has sold our farm system as the model for the rest of the world. But other countries aren't buying it. Brazil and the European Union are planning to file cases at the WTO, charging the U.S. with illegal agricultural dumping. Many WTO member countries are looking for a new economic model that benefits farmers. We would do well to follow their lead.

NEW WEBSITE ON UNCTAD TRAINING ACTIVITIES

Geneva, 26 May (DNS) – The United Nations Conference on Trade and Development (UNCTAD) has launched a new website on human resources development.

It features information about **TrainForTrade**, the organization's programme for training and capacity-building in international trade, trade-related services, investment

and port management. The site includes news about upcoming training events, distance learning activities and training statistics.

UPOV ABANDONS CRITIQUE OF TERMINATOR SEEDS

The United States Government and the multinational seed industry have forced UPOV to abandon its critique of the 'terminator seeds', according to the ETC Group. The blunting of such criticisms is clearly a sop meant to increase market access around the world for the the 'terminator' seeds produced by the gaint biotechnology firms. The following was the news as put out by the ETC Group.

After two days of intense diplomatic wrangling in Geneva, US patent officials succeeded in turning the expert advice of an inter-governmental secretariat critical of Terminator technology into little more than a promotional paper for plant breeders' rights.

On April 10-11, US government representatives worked hard in Geneva to convince 51 other countries that the expert advice of the Union for the Protection of New Varieties of Plants (UPOV) is wrong and that UPOV is "not competent" to comment on the possible intellectual property implications of Terminator seeds. The paper in question, a memorandum prepared by UPOV's Secretariat at the request of member governments of the UN Convention on Biological Diversity (CBD), was presented to an Expert Panel convened by the CBD in Montreal, February 19-21. The Expert Panel met to examine the implications of Terminator seed technology for small farmers, indigenous peoples and local communities. Although UPOV's paper was presented at the Montreal meeting, and had been available on UPOV's web site since January, UPOV bowed to US pressure and

guttled the memorandum, replacing it with a sanitized and shorter "position paper" that carries none of the criticisms of the original report.

In withdrawing its memo on GURTs, UPOV has allowed the US government, owner of three patents on Terminator technology, to sanitize and erase the intergovernmental organizations' perspective on an important policy issue with direct relevance to plant intellectual property.

UPOV's new document is completely irrelevant because it fails to respond to the CBD's request and offers no new information about the intellectual property implications of Terminator. The withdrawal of the UPOV memo has also confounded the work of the CBD's Expert Panel on GURTs that met in February to consider the impact of Terminator on small farmers, indigenous people and local communities.

Terminating UPOV? The seedy squabble over Terminator technology illustrates the bigger issue of UPOV's diminishing position in today's rapidly changing intellec-

tual property climate. On the one hand, the Americans and Japanese continue to stretch the boundaries of conventional patents to supersede and override UPOV-style plant variety protection. On the other hand, new technologies such as Terminator threaten to make legal forms of monopoly control over plant germplasm obsolete. Why bother with plant variety protection when Terminator gives you timeless, limitless protection without the need for lawyers and courts?

The Bottom Line: UPOV has succumbed to the strong-arm tactics of the US government and the multinational seed industry, both of whom have vested financial interests in Terminator technology. If member governments of UPOV had any doubts about who determines policy within the Union, they need only examine the recent case of Terminator.

The original UPOV memo and the correspondence between UPOV and the US government, as well as the ISF letter to UPOV, can be viewed here: <http://www.etcgroup.org/documents/USAvsUPOV.pdf>



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