THE FIRST ICO
WORLD COFFEE CONFERENCE
17 - 19 May 2001

REPORT OF THE PROCEEDINGS

INTERNATIONAL COFFEE ORGANIZATION
The first World Coffee Conference was organized by the International Coffee Organization at the Hilton Park Lane Hotel, London, from 17 to 19 May 2001, in cooperation with F.O. Licht, and under the supervision of the Chairman, Mr. Jorge Cárdenas of the Federación Nacional de Cafeteros de Colombia.

**Sponsors**

- **Diamond Sponsor and Host of the Welcome Cocktail Reception**
  - Cafés do Brasil

- **Gold Sponsor and Luncheon Host on Friday 18 May**
  - Neumann Kaffe Gruppe

- **Gold Sponsor and Luncheon Host on Saturday 19 May**
  - Banco Alemán Platina

- **Silver Sponsor and Coffee Break Sponsor on Friday 18 May**
  - Nestlé

- **Silver Sponsor and Coffee Break Sponsor on Saturday 19 May**
  - Tchibo

**Exhibitors**

- ABN Amro
- Atlas Stord
- CAB International
- F.O. Licht
- IACO
- Kraft
- LIFFE
- Nestlé
- OAMCAF
- Sortex
- Tokyo Grain Exchange

**Supporting organizations**

- Café de Colombia
- Fococafé

This report has been prepared by Mr. Surendra Kotecha, Coffee Quality and Marketing Consultant, and the Documents Unit of the Organization.

© International Coffee Organization, 2002
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Background: Why a World Conference on Coffee?</td>
<td>5</td>
</tr>
<tr>
<td>Mr. Celsius A. Lodder, welcome address</td>
<td>6</td>
</tr>
<tr>
<td>Mr. Jorge Cárdenas, opening speech</td>
<td>6</td>
</tr>
<tr>
<td>Ms. Kate Timms, opening welcome address</td>
<td>8</td>
</tr>
<tr>
<td><strong>Session One – Global Trends</strong></td>
<td></td>
</tr>
<tr>
<td>Chaired by Mr. Jorge Cárdenas</td>
<td></td>
</tr>
<tr>
<td>Digital Capital, Business Webs and the World’s Coffee Economy</td>
<td></td>
</tr>
<tr>
<td>Mr. Don Tapscott</td>
<td>9</td>
</tr>
<tr>
<td>Globalisation and Developing Countries</td>
<td></td>
</tr>
<tr>
<td>Prof. Joseph Stiglitz</td>
<td>10</td>
</tr>
<tr>
<td>Strategies in Developing Countries Dependent on Primary Commodities</td>
<td></td>
</tr>
<tr>
<td>Mr. Robert Thompson</td>
<td>14</td>
</tr>
<tr>
<td>Panel Discussion on Global Trends</td>
<td></td>
</tr>
<tr>
<td>Mr. Roberto Junguito</td>
<td>17</td>
</tr>
<tr>
<td>Mr. Rolf W. Boehnke</td>
<td>18</td>
</tr>
<tr>
<td><strong>Session Two – Primary Products and Development</strong></td>
<td></td>
</tr>
<tr>
<td>Chaired by Mr. Arnoldo López Echandi</td>
<td></td>
</tr>
<tr>
<td>Primary Products and the Economic Development of Latin America</td>
<td></td>
</tr>
<tr>
<td>Mr. Paulo Paiva</td>
<td>20</td>
</tr>
<tr>
<td>Coffee, Commodities and Economic Development</td>
<td></td>
</tr>
<tr>
<td>Mr. Juan Manuel Santos</td>
<td>21</td>
</tr>
<tr>
<td>Coffee and the Economic Development of Africa</td>
<td></td>
</tr>
<tr>
<td>H.E. Gnassingbe Eyadema</td>
<td>23</td>
</tr>
<tr>
<td>Agriculture, Coffee and the Economic Development of Asia</td>
<td></td>
</tr>
<tr>
<td>Mr. Supachai Panitchpakdi</td>
<td>24</td>
</tr>
<tr>
<td><strong>Conference Luncheon</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sponsored by Neumann Kaffe Gruppe</strong></td>
<td></td>
</tr>
<tr>
<td>The Role and Performance of Futures Markets in Coffee</td>
<td></td>
</tr>
<tr>
<td>Mr. Brian Williamson</td>
<td>26</td>
</tr>
<tr>
<td><strong>Session Three – Major Supply and Demand Trends</strong></td>
<td></td>
</tr>
<tr>
<td>Chaired by Mr. Michael Neumann</td>
<td></td>
</tr>
<tr>
<td>Practical Proposals for the Future Strategy of the Coffee Industry</td>
<td></td>
</tr>
<tr>
<td>Mr. Jorge Esteve</td>
<td>27</td>
</tr>
<tr>
<td>Growth in the Global Coffee Industry</td>
<td></td>
</tr>
<tr>
<td>Mr. Doug Burns</td>
<td>28</td>
</tr>
</tbody>
</table>
Session Three (contd.)

Growing the World's Coffee Consumption – Nescafé, a Global Brand
Opening up New and Increasing Coffee Demand
  Mr. Gordon Gillett ............................................................................................................29
  Mr. Robert F. Nelson ..........................................................................................................30
Coffee – the Next Five Years
  Mr. Helmut Ahlfeld .................................................................................................................30

Panel Discussion on Supply and Demand
  Mr. Klaus Jacobs......................................................................................................................31
  Mr. Michael Wheeler ...............................................................................................................32
  Mr. Ong Siong Kai.................................................................................................................33
  Mr. Roel Vaessen ..................................................................................................................33
  Mr. Doàn Triệu Nhan ............................................................................................................34
  Mr. Tatsushi Ueshima ...........................................................................................................35

Conference Reception and Banquet
  Hosted by the International Coffee Organization
    H. E. Agbeyome Messan Kodjo ..............................................................................................36
    Mr. Marcus Vinicius Pratini de Moraes .............................................................................36

Session Four – Institutions and Development
  Chaired by Mr. Marcus Vinicius Pratini de Moraes

Institutions and Development
  Prof. Robert Bates .........................................................................................................37
Has the Coffee Federation (of Colombia) become redundant?
Collective Action and the Market in Colombian Development
  Prof. Rosemary Thorp ........................................................................................................39
Issues for Producing Countries
  Mr. Sergio Amaral .............................................................................................................41

Panel Discussion on the Role of Institutions and Development
  Prof. Christopher Gilbert ...................................................................................................42
  Mr. Diego Pizano .................................................................................................................43

Conference Luncheon
  Sponsored by Banco Alemán Platina
    The Specialty Coffee Revolution
      Mr. Orin Smith .............................................................................................................45
## Session Five – Scientific and Technological Aspects
Chaired by Mr. Andrea Illy

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee and Health Project</td>
<td>46</td>
</tr>
<tr>
<td>Prof. Darcy Lima</td>
<td></td>
</tr>
<tr>
<td>Coffee and Health</td>
<td>47</td>
</tr>
<tr>
<td>Prof. Peter Martin</td>
<td></td>
</tr>
<tr>
<td>On Promoting the Good News About Coffee</td>
<td>47</td>
</tr>
<tr>
<td>Mr. Daniel G. Steffen</td>
<td></td>
</tr>
<tr>
<td>Sustainable Coffee</td>
<td>48</td>
</tr>
<tr>
<td>Mr. Gabriel Cadena</td>
<td></td>
</tr>
<tr>
<td>State of the Art Review on Coffee Technology, Genetics, Diseases, Organic Coffee and Sustainable Development</td>
<td>50</td>
</tr>
<tr>
<td>Mr. Peter Baker</td>
<td></td>
</tr>
<tr>
<td>Research Priorities for Coffee in the New Millennium</td>
<td>51</td>
</tr>
<tr>
<td>Mr. R. Naidu</td>
<td></td>
</tr>
<tr>
<td>The Coffee Berry Borer and Coffee Research at the USDA</td>
<td>52</td>
</tr>
<tr>
<td>Mr. Fernando E. Vega</td>
<td></td>
</tr>
<tr>
<td>Chairman’s Closing Remarks</td>
<td>53</td>
</tr>
</tbody>
</table>

Annex: The Quebec Declaration................................................................. 54
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICO</td>
<td>International Coffee Organization</td>
</tr>
<tr>
<td>WCC</td>
<td>World Coffee Conference</td>
</tr>
<tr>
<td>ACPG</td>
<td>Association of Coffee Producing Countries</td>
</tr>
<tr>
<td>CABI</td>
<td>CAB International</td>
</tr>
<tr>
<td>CBB</td>
<td>Coffee berry borer (broca)</td>
</tr>
<tr>
<td>CENICAFE</td>
<td>National Coffee Research Centre (Colombia)</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CFC</td>
<td>Common Fund for Commodities</td>
</tr>
<tr>
<td>ECF</td>
<td>European Coffee Association</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
</tbody>
</table>
| FNC          | *Federación Nacional de Cafeteros de Colombia*  
National Coffee Growers Federation of Colombia |
| GATT         | General Agreement on Tariffs and Trade |
| HIPC         | Highly Indebted Poor Countries |
| IACO         | Interafrican Coffee Organisation |
| ICA          | International Coffee Agreement |
| ICB          | International Commodity Body |
| ICS          | Institute of Coffee Studies, Vanderbilt University, USA |
| IDB          | Inter-American Development Bank |
| IDRC         | International Development Research Council |
| IMF          | International Monetary Fund |
| ITC          | International Trade Centre |
| LDC          | Less developed countries |
| LIFFE        | London International Financial Futures and Options Exchange |
| MAFF/DEFRA   | UK Ministry of Agriculture, Food and Fisheries |
| NCA          | National Coffee Association of USA, Inc. |
| NGO          | Non-governmental organization |
| OAU          | Organization of African Unity |
| OECD         | Organization for Economic Cooperation and Development |
| UNCTAD       | United Nations Conference on Trade and Development |
| UNEP         | United Nations Environment Programme |
| USDA         | United States Department of Agriculture |
| WTO          | World Trade Organization |
SOME COMMENTS ON THE WORLD COFFEE CONFERENCE

‘One of the best Conferences I have ever attended’
Francisco Jurado, Nestlé España

‘The Conference clearly demonstrated that tariff barriers to value added coffee was a major constraint to free trade’
Caleb Dengu, Common Fund for Commodities

‘Very much needed forum – Needs follow up actions’
Douglas Burns, Kraft Foods

‘Very informative, addressed issues that are very serious to world coffee production and consumption and therefore prices’
Leslie D. Omari, Tanzania Coffee Board

‘The issues were my main concern and many proposals were realistic’
Mrs. M.M. Baldé, Embassy of Côte d’Ivoire

‘Excellent content and speakers’
Gerald Baldwin, Director, Peet’s Coffee & Tea

‘Good content, excellent participation’
V. Balaraman, Hindustan Lever Ltd, India

‘Great effort to bring all of the coffee actors together at trying to attack the criticism through mutual co-operation’
Ernesto Sol, Consejo Salvadoreño del Café, El Salvador

‘The attendance is marvellous, the presentations did well and the topics were fantastic’
S. P. Ika’a, Ministry of Commerce, Nigeria

‘It has been a great opportunity to listen to the best speakers of the coffee industry’
Hernando de la Roche, Director, Hencorp Coffee Group

‘Well chosen themes, excellent speakers, good atmosphere, should be repeated’
José A. Buitrago, Cafensa, Nicaragua

‘A distinguished gathering of a wide range of coffee interests from around the globe at a very critical phase in the coffee industry’
Ms. Lakshmi Venkatachalam, Coffee Board of India

‘I have never been to a Conference that has such a distinguished and interesting line up of speakers’
Mrs. Karen St. Jean-Kufuor, ACPC
FOREWORD

This publication contains a detailed summary* of the papers presented at the ICO World Coffee Conference held at the Hilton Park Lane Hotel, London, from 17 to 19 May 2001. The complete papers are available on the ICO Website, www.ico.org.

It is with great satisfaction that I can present the key elements of the presentations from speakers of exceptional status and expertise in the field of coffee, so ably marshalled through the dedication of the Chairman of the Conference, Mr. Jorge Cárdenas, General Manager of the Federación Nacional de Cafeteros de Colombia.

It is my hope that the material presented in this publication will lead to a number of actions over the next months and years, which will achieve a real improvement in the crisis situation facing the world coffee market at the beginning of 2001.

Celsius A. Lodder
Executive Director
International Coffee Organization

* This summary includes footnotes by the Consultant designed to clarify or add relevant information.
INTRODUCTION

As provided for by Resolution number 385 of the International Coffee Council, the first World Coffee Conference was held in May 2001. The aim was to find solutions to the current crisis in oversupply and prices, particularly related to alleviating poverty of small rural farmers in developing countries. Coffee is a very influential commodity, and has contributed to the comprehensive evolution of many developing and emerging economies, providing funds for new investments, rural livelihoods and public budgets. Rated for many years as the second largest traded export commodity after crude oil, and renowned as the mind awakening fuel of civilisation, the beverage of coffee has an important place in every day lives and livelihoods of the world. This report has been compiled to highlight the main points raised by each speaker in the Conference.

Many fundamental changes have occurred in the 1990s, since the beginning of liberalisation of commodity marketing systems in developing countries. Most commodity boards and parastatal marketing institutions established in the first half of the 20th century have been reorganised. The trend for more widespread free trade accelerated just after the end of the cold war and, in the case of the coffee industry, more so due to the end of the price stabilising economic clauses in the International Coffee Agreements (ICAs). The consequences of restructuring are many, still being realised and resolved.

Globalisation has taken on a new meaning in the last 10 years. However, inadequate systems of global governance, not taking into account the requirements of all beneficiaries, allowed the self interest of some to bias the balance in favour of a few powerful people and nations, who also made the rules for the structures. Continuation of massive agricultural subsidies while imposing liberalisation terms on developing countries tilted the balance further in the agriculture sector, on which these economies are dependent. Small scale farmers no longer receive the modest structural development subsidies or loans. They are no longer protected by seasonal price guarantees from parastatal marketing boards smoothing over price volatility. The same cash export-crop farmers produce staple food crops, which have to compete in their own urban markets with imported food, subsidised at the growing and export stages in developed countries.

Insufficient coordination in national and international organisations that advocate macro-policy, and inadequate private and public institutional capacity for the new fast changing environment, have not allowed transparent and effective implementation of the adage – think global, act local. Complete renegotiations of unequal global agreements are required, with new appropriate ground rules to protect the interests of all participants and to balance the structure for better distribution of globalisation benefits to be achieved.

The world’s coffee industry further identified record low prices, higher volatility, discontinuation of sufficient research and extension, and perhaps trading systems, as the major current problems. Knowledgeable apolitical institutions are required, capable of cogently binding the local socio-economic welfare systems with national infrastructures, and harmonising them with the global projections of the industry. Promotion of consumption is also much needed. The Conference considered how the inadequacies of the current structure can be changed to meet the demands, within the parameters of the new and fast changing technology, of farm production, trading and logistics, as
well as the manufacturing and marketing aspects, always placing due emphasis on consumer preferences. Radical changes in the thinking about the global coffee structure and the policies of producing countries are required to rationalise global supply with consumer demand in terms of quantity as well as quality.

These changes in policies can be best integrated further through judicious use of strategic information technology concepts; with effective implementation of identified scientific advances, for instance in genetics and integrated pest management, pertaining to efficient productivity. The inclusion of a session on ‘Coffee and Health’ in the Conference is very pertinent to intended EU legislation and increased consumer awareness. The EU ‘farm to fork’ scrutiny, or in this case ‘tree to cup’ may actually help to endorse the positive discoveries emerging about the health benefits of coffee, provided they are appropriately approached and presented. In addition to the sustainable goals of price and quality throughout the marketing chain, the global aspirations of environment amelioration and poverty alleviation are also paramount considerations for the public and private sector partnerships of the future.

Jorge Cárdenas Gutiérrez
Chairman
World Coffee Conference
THE FIRST ICO WORLD COFFEE CONFERENCE

REPORT OF THE PROCEEDINGS

Background: Why a World Conference on Coffee?

The world is full of coffee beans. Have a cup of your favourite blend (or single estate shade grown limited edition special) of the beverage renowned to awaken the intellect, while reading this report, and you will assist consumption as well as enhance the understanding of the issues raised by the world of coffee people, when they gathered in London, 17 – 19 May 2001.

The employment and welfare of a majority of the world’s population depends on the production and export of raw commodities. Grown for cash and export, agricultural commodities form a major source of revenue for many developing nations and their farmers. In most countries, it is the small growers who produce 50 to 90 percent of the nation’s cash crops on their subsistence farms. Coffee is one of the most significant of such commodities. Coffee has also been rated, second only to black oil, as the most traded commodity in the world.

The principal aim of development agencies is to reduce poverty. The world leaders resolved at the U.N. Millennium Summit to reduce world poverty by 50 percent before 2015. So, what could be a better way to improve the socio-economic status of producers and their countries than to address the policies ruling such an important commodity? And who better than the prominent and influential members of the world coffee community to highlight the way forward?

It is with this aim that the International Coffee Organization (ICO) Council resolved to have a World Coffee Conference. The ICO Member countries appointed the Colombian representative, Mr. Jorge Cárdenas, as the Conference Chairman. He is the General Manager of the Federación Nacional de Cafeteros de Colombia (FNC), the National Coffee Growers Federation of Colombia, who led the way for this meeting. Amongst many important views, we have those of a professor who was an economic adviser at the White House and later the chief economist for the World Bank; the African experience from the President of Togo; the Latin American outlook from the Brazilian Vice President and the Colombian Finance Minister; and the Asian scenario from the World Trade Organization (WTO) Director General designate, formerly the Vice Prime Minister and the Minister of Commerce of Thailand.

Previous ICAs had economic clauses to support and stabilise prices by using export quotas, which were backed by consumers as well as producers, but they ended in 1989. Breakdown of the cold war, greater thrust for free trade and the removal of subsidies also saw the roles of many parastatal marketing boards changing into regulatory bodies, and liberalised marketing systems replacing the centralised institutions. This resulted in many benefits overall for the coffee industry. For example, a higher percentage of the producing country’s export revenue ends up in the hands of the farmer. However, much greater volatility, without the umbrella of guaranteed minimum prices, increased the uncertainty for the producers and destabilised their annual revenues. Amongst other consequences of liberalisation, reduced government participation in areas such as research and extension have left gaps in supporting the infrastructure for less organized growers.

In the last 15 years, changing dynamics in production, consumption, quality and prices have also been exacerbated with greater frequency by other less controllable factors such as droughts, floods, earthquakes and El Niño related season shifts. The resulting market volatility has been ably handled by international traders and roasters with access to the tools, knowledge and the means, but has left the less structured producers and inexperienced traders vulnerable.
The Conference was designed to strengthen linkages through discussion amongst the various influential players in the private and public sectors; to identify priorities and promote strategic development policies with continued debate amongst producers, consumers, traders, academics, research and regulatory institutions, funding agencies and governments; to consider the current trends and future challenges and try to find effective solutions.

**Main Headings and Introduction**

The Conference agenda was divided into five parts, headed Global Trends, Primary Products and Development, Major Supply and Demand Trends, Institutions and Development, and Scientific and Technological Aspects, all subjects thought to most affect the present and future of coffee production, trade and politics. We shall sequentially follow the progress of the Conference, with the facts and opinions presented by the speakers, and then the analyses during panel discussions with significant highlights of each session.

*In the initial welcome address, the Executive Director of the ICO, Mr. Celsius A. Lodder, suggested two reasons for the high attendance and interest for the Conference. Firstly the initiative and prestige of Dr. Jorge Cárdenas, the General Manager of FNC of Colombia, who is the Chairman of the World Coffee Conference (WCC), lent the necessary political clout. Don Diego Pizano from Colombia was of great assistance and ably supported Dr. Cárdenas in constructing the Conference programme design, attracting influential speakers, and ensuring success. The ICO Executive Director also praised the hard work of F.O. Licht, the Conference organisers, and the ICO staff.*

**Falling Prices, a major De-stabilizer**

Mr. Lodder indicated the second reason for the high level of interest as the current very low coffee export price for producers, caused by imbalance of supply against demand. Readers who may not be fully aware of events in the coffee industry should note that, using the futures market levels in New York for Arabica coffee and London for Robusta coffee as indicators, the world prices have fallen by almost 50 percent during the year 2000, from 120 to 70 US cents per pound weight for Arabicas and US$1,260 to $620 per metric tonne for Robustas. In the three months between the Conference and writing this report, prices have further dropped by about 20 percent, down to 50 US Cents/lb and US$470 per tonne.

“We need to examine ways to achieve greater stability, increase demand and improve quality.” Under the new ICA 2001, Mr. Lodder committed the ICO to respond to ideas from the Conference and play its full part in its role of ‘Working for the world coffee community’ – the ICO motto. The ICO already manages projects examining the effect of low prices on quality; promotion of coffee consumption, including domestically in producing nations; on sustainable coffee systems, including production oriented towards market demands driven by consumer, environmental and ethical (responsible) trade concerns.

*In his opening speech, the Conference Chairman, Mr. Jorge Cárdenas, also refers to significant facts about prices, in his comprehensive address entitled ‘The World Coffee Crisis’. He considers the situation the most dramatic in the last 100 years, with export prices in constant US dollars being the lowest since 1900 and below levels in the 1930 Depression, which was disastrous for many developing countries. He stated that more than 50 producing countries in the world are quite significantly reliant economically on the coffee sector for income, growth, employment and development. For these governments, coffee has helped with public finance, created infrastructures and provided funds for urban and industrial development. Socially, coffee has provided employment for many, many more than the 20 million coffee farming families who struggle for survival with less than the equivalent of one US dollar of cash per day, and now becoming poorer.*
In addition to the record low prices, there is a growing imbalance in the distribution of funds within the global coffee turnover, Mr. Cárdenas adds. During years of ICAs with economic clauses, the consumer spent about US$30 billion, of which about one third was reaching the exporting countries. This share has now less than halved at 15 percent, with an estimated US$8 billion of the US$55 billion consumption reaching the producers.

Apart from the actual price and revenue distribution, problems have been exacerbated by greater price volatility. The current annual price volatility is rated at 50 percent, compared to 10 or 15 percent during the time of ICA regulatory clauses. Many World Bank and other studies have shown these instabilities of price volatility and income distributions to be extremely detrimental to the progress of development in producing countries.

Critical Crisis

To highlight the crisis to the rest of the world’s leaders and the international community, in April 2001, 12 Heads of States from Latin America and the Caribbean have issued a text called the Quebec Declaration. This was also circulated at the Conference and is attached as an annex to this report. Apart from resolutions for improving consultations and cooperation within the coffee industry, inviting the governments of major countries like the USA and Canada to subscribe again to the membership of the ICO and ICA to help find solutions, the main message that will have very meaningful results after implementation is:

“To promote the creation of appropriate financial instruments, for the regional multilateral banks, which will permit the regulated management of world coffee supply, including price-cover instruments and instruments for financing stocks in producing countries.”

The Declaration also urges the development funding agencies not to promote expansion of production, but to conduct initiatives and policies emerging from the Declaration and the Conference, so that producing countries can successfully establish a second-generation of the International Coffee Agreement. A follow-up meeting of the signatories has been planned in September 2001.

Globalisation, Effects and Solutions

Mr. Cárdenas, and later a few other speakers in the Conference, referred to coffee as one of the oldest ‘globalised’ industries. Considering the scope of the subjects and the aims of the Conference, the task set before us definitely emerges as global. The widespread numbers of producers have already been mentioned. On the consumption side, Mr. Cárdenas pointed out that there are more than one billion habitual drinkers of the beverage. This is only 20 percent of the world population and one of the aims should be to double this number in the next 10 to 15 years.

Promotion: To achieve the aim of more people drinking coffee on a daily basis, one needs to highlight the positive aspects of coffee. Mr. Cárdenas quoted the world famous Hamburg based coffee trader, Mr. Bernhard Rothfös, claiming coffee to be ‘the intellectual fuel of civilization’. Scientific studies by Vanderbilt and Harvard Universities in the USA have shown that coffee increases mental concentration, activates the memory, and has anti-depressant qualities.

Since he led the design of the agenda, Chairman Mr. Cárdenas’ opening speech provides a good overall summary of the major topics of the Conference sessions, already mentioned above, and the reasons for choosing them. His speech also mentions some points the speakers are likely to address, and hopes that the panel discussions and questions may show us the way to resolve the main issues.
Would the Internet Revolution and globalisation marginalize some of the developing countries without access to information technology and world capital markets, or can this be prevented? To what extent are producing countries still reliant on coffee and other commodities for their development? Prominent speakers would then address the main supply and demand trends, with panel discussions to follow. Subsequently, academic speakers would address the roles of institutions in the functioning of the coffee industry. The last session would be scientific, including topics on health, pests and diseases, and sustainable farming systems for cost effective, environmentally sound, production techniques for qualities according to consumer preferences, and spearheaded by scientific advances.

Two other important issues were treated separately under Mr. Cárdenas’ speech introducing the Conference. The role of commodity exchanges in price formation, to be addressed by the Chairman of the London Futures Market; and the specialty coffee revolution by the President of Starbucks. On the political front, there was special mention of the President of Togo, H.E. Gnassingbe Eyadema, who would deliver a statement on behalf of many African countries and the Vice-President of the Republic of Brazil, who would give a speech at the main dinner reception.

Mr. Cárdenas ended his initial speech by listing some of the suggested solutions for the crisis, which he hoped would be further discussed and supported by the international community to “ensure a stable supply of high quality coffee at remunerative prices to producers and acceptable prices to consumers”. A) Adopting international quality standards banning inferior qualities. B) Promoting and adopting responsible production policies disallowing increases in planted areas. C) Providing finance to enable producers to regulate their marketing systems and accumulation of stocks (when necessary). D) Intensifying promotion efforts to increase consumption. E) Supporting diversification efforts in producing countries by opening up markets in high-income countries – and here Mr. Cárdenas hopes that the next round of talks at the next WTO Round Table will provide special benefits for developing countries. F) Strengthening multilateral credit programmes for human capital formation, increased productive efficiency and sustainable development. G) Increasing local processing (for value addition) in countries of origin through strategic alliances with multinational companies. H) Supporting the use of futures markets as proposed by Mr. James Wolfensohn, President of the World Bank.

The Chairman, Mr. Cárdenas, concluded by urging all governments to be ready with their plans to strengthen the links from the grower to the final consumer before 25 September 2001, for international discussion under the ICA 2001. He thanked all the sponsors of the Conference.

Ms. Kate Timms, Head of Agriculture and Food Industry Directorate of the Ministry of Agriculture, Food and Fisheries – MAFF (now DEFRA) in the UK, was the third of the opening welcome addresses to Conference delegates at the evening reception on 17 May 2001. Ms. Timms highlighted London as one of the major centres of communication, travel, as well as commerce – insurance and finance. London as a base for the ICO and LIFFE (London International Financial Futures and Options Exchange) facilitates international membership and provides assured trading liquidity to coffee and other industries.

Ms. Timms also talked about current low prices, producer incomes and the importance of agriculture and its primary commodities to promotion of livelihoods in developing economies. She went on to point out UK’s firm commitment to ‘assisting the integration of developing countries into the multilateral trading system’ through the EBA (Everything But Arms) initiative, aiming to provide

---

1 This includes domestic consumption in producing countries.
2 This refers to the International Task Force for the provision of Commodity Price Risk Management to reach small farmers and producers, by aggregating their risk into hedgeable quantities, to protect their revenues using terminal market instruments and off-the-exchange arrangements.
LDCs (least developed countries) access to EU markets. During the year 2000, UK provided £2.2 billion for development, aiming to reach the 0.7 percent of GNP target set for development assistance by the U.N. The UK has spent £15 million on direct coffee research and development projects in 15 developing countries since 1987, mainly on quality analysis, prediction and integrated pest management.

The UK has been known as a tea-drinking nation but is quickly gaining in coffee consumption, contributing to more than 50 percent of the hot beverage market. MAFF/DEFRA supports the various coffee projects through the unique forum of the ICO – quality improvement, rehabilitation, and sustainable production systems. In particular, the new ICA is inclusive of increased cooperation with the private sector, adding strength towards forming a more sustainable world coffee economy. One of the key aspects of the new ICA is this World Coffee Conference (WCC). Ms. Timms concluded by wishing and confidently predicting the WCC and the ICA a success with lasting benefits.

Friday, 18 May 2001

Session One

GLOBAL TRENDS

Chaired by Dr. Jorge Cárdenas, General Manager, Federación Nacional de Cafeteros de Colombia.

♦ Mr. Don Tapscott, President of Digital4Sight, first spoke on “Digital Capital, Business Webs and the World’s Coffee Economy”.

This vast subject certainly falls amongst the most important in the current global trends, and actually causes many of the rapid changes in the trends in other aspects of the world’s activities, including coffee. Mr. Tapscott re-named his presentation topic as “Alliance for Converging Technologies”. In his view the Internet will fundamentally change the nature of business in every sector of the economy, but not in the manner many people think. The first lesson learnt, in the initial wave of rise and fall of the Internet or dot.com businesses, is that profitability is the fundamental arbiter of business success. Customers should be willing to pay more than the cost of the services provided, and earnings cannot be just through peripheral revenues such as advertisements, without a basic backbone service.

The speech then briefly highlighted the importance of the coffee industry for economic, social and political structures of more than 40 Asian, African and Latin American countries. Coffee accounts for incomes and employment of more than 20 million families worldwide. This important primary commodity has seen many violent changes in supply and prices, particularly in the last 10 years after the collapse of the ICA (with economic clauses).

The PowerPoint presentation with slides has the copyright name New Paradigm Learning Corporation, 2001, which in this instance sends the principal message that the “dot.com” (the new paradigm) aid seekers and beneficiaries have managed to successfully reach many more of the donors compared to traditionally communicated proposals. Mr. Tapscott explained the word ‘paradigm’, not just as another buzz-word for ‘change’ but as a significantly different approach with facets that transpose the original concepts of operation, far beyond the realms of current thinking and imagination.

The presentation followed with the different elements of Digital Capital, such as human capital, business models, relationship capital. We then saw many diagrams showing how the world of computers managed to converge vital aspects of today’s business, for instance a) Communication by
telephone, cable, satellite and radio, with b) Media – entertainment, publishing and information providers. It was also most impressive to see the bar chart of 2000 users of the Internet in 1983 doubling every year from the previous year, reaching over one billion users in the year 2001.

Without illuminating the direct relationships and relevance to the coffee industry, this presentation did little justice to the great importance of information technology (IT). One can see, however, that the examples (the author of this report has inserted some commodity applications in brackets) of various types of business Webs – the market or Agora (electronic auctions used in coffee and tea, connecting buyers and sellers), Aggregation (of small farmer quantities of produce and inputs), Value Chains (filière or marketing links from farmer’s tree to consumer’s cup), and strategic or symbiotic Alliances (say of producer / consumer ends of the chain, for instance the gourmet coffee producer to specialty roaster) – can all make considerable sense and help integrate the coffee industry by their various applications. The distributive network (logistics) superimposes all the different types of webs mentioned.

Mr. Tapscott’s projections into the future potential, for instance how the microchip in the milk container can help the refrigerator mother-board to order from the supermarket or make the house-owner’s (electronic) shopping list, are useful ideas.

The speaker’s concluding message about resistance to change is also very relevant to the reformation of commodity industries. The necessary paradigm shifts: 1) involve a period of uncertainty, dislocation, and at times even conflict; 2) are received with doubt, lack of enthusiasm and often resistance from vested interests; 3) require a considerable shift in thinking, particularly for established leaders. The lesson to follow is simple. In dealing with the changes that have occurred, the crisis we are currently facing, and the changes required for resolutions, we should not be averse to embracing completely new sets of positive circumstances, rules and ways of dealing with them. A participatory democratic process also leads to better change.

Professor Joseph Stiglitz, of the Brookings Institution, USA, spoke next on “Globalisation and Developing Countries”.

Radical changes are suggested as solutions. This speech began by emphasising the importance of the topic. Four hundred years old with a turnover of over US$50 billion, providing livelihoods for hundreds of millions of people in many countries, the coffee industry is certainly globalised. With more than 60 producing countries involved, most of which are developing and many deriving as much as 60 percent or more of their export revenue from coffee, this globalisation is certainly important for the developing countries.

Professor Stiglitz said that there are many current concerns, the main ones being, discontent with globalisation, high level of price volatility and the 50 percent decline in prices in the last 15 months. Of course, the long term decline and volatility of commodity prices have all been long standing issues discussed by many economists. Professor Stiglitz talked about how differently these issues portray themselves today compared to say 15 years ago.

As a consequence of better technology, profit margins at the manufacturing end have increased while grower prices have declined, without the commensurate falls in prices to the consumer. Such discrepancy in recent coffee globalisation trends is understandably difficult to accept. However, it is a part of the broader discontent of changes in the world brought about by

---

3 Practical examples of the use of IT in logistics, price discovery, monitoring stocks and inventory control are elaborated in the Consultant’s commentary on this report.

4 The dilemmas presented to leaderships by paradigm shifts seem to echo privatisation experiences of commodity marketing bodies in developing countries and even industries in developed countries.

5 Later (October 2001) jointly awarded the Economics Nobel Prize.
increasingly powerful multinational conglomerates. Prof. Stiglitz developed three themes about this overall unhappiness with the changes. First are the positive and secondly the negative forces of globalisation. And thirdly he speaks about the source of these detrimental effects.

Globalisation is very powerful and has resulted in significantly positive outcomes in recent decades in East Asia, even discounting recent financial crises. In the last 30 years, per capita incomes have increased eight fold and poverty has been drastically reduced in several East Asian countries.

However, many other countries, particularly the already very poor, have suffered. A recent U.N. conference on developing countries highlighted that the number of poor countries, and the number of people in absolute poverty, have increased in the last 10 years. Expectations of better incomes and living standards have not materialised in the former Soviet Union block of communist countries, as envisaged by the introduction of open and free market situations. Russian incomes are 40 percent lower and poverty rates have jumped from 2 to 50 percent.

Other globalisation factors that have caused poverty to increase are 1) terms of trade agreements without fair balance. Prof. Stiglitz gave the example of the Uruguay Round resulting in gain for the USA and Europe at the expense of lower incomes in Sub-Saharan Africa. And 2) how the International Monetary Fund (IMF) pushing for capital market liberalisation caused greater volatility in less structured regions with lower liquidity and capacity to handle the changes. This caused problems in South-East Asia and elsewhere. The powerful force of globalisation can also be highly detrimental.

Professor Stiglitz argues that the principal reason for this occurring is the system of governance in the world. Formation of national economies centuries ago in Europe and the USA were concurrent with governments that ensured tight financial market regulatory frameworks with safety nets. In contrast, we have today a system of global governance that the world follows (or may be has to go with the flow) but with inadequate structures and rules of global government.

**Global Governance**

Professor Stiglitz said that, with his experiences over the last 15 years, he has observed world business leaders (he meets at annual Davos meetings) beginning to realise that the so-called global trade agenda created for the whole world has been dominated and driven by the developed countries, benefiting themselves the most. While pressuring developing nations to lower their trade barriers in the guise of free trade, the developed countries have failed to freely allow the import of agricultural goods in return. Such phenomena increase the disparities.

Whilst everybody believes in competition being free of subsidies, each individual, corporation and country looks after ‘number-one’ when it comes to the crunch, affecting their own situation. And the seat of power lies with the more developed. Although they lecture other countries to curtail agricultural subsidies, the developed nations in Europe, the USA and Japan subsidise their farmers heavily. It is so out of proportion that the western subsidies far exceed incomes of most farmers in developing nations.

The Conference audience was also given the first hand example of when Professor Stiglitz was at the White House about 10 years ago. After the end of the cold war, the Russian faction stopped making aeroplanes, considerably reducing the demand for aluminium. Around the same time, the soft drink cans could also be made with less aluminium. This resulted in a precipitate drop in prices. When the CEO of aluminium giants Alcoa made the expected appointment, Prof. Stiglitz anticipated a proposal for price subsidy. He was taken aback when Alcoa lobbied for a global cartel, and successfully. Contrary to the efforts of convincing Russia to join market economies, the cartel was to keep Russia out of play! The Assistant Attorney General for the USA had to state to the entire sub-cabinet of the Economics Group present, that she may have to subpoena all present for violation
of anti-trust laws! Ironically, the CEO of Alcoa, Mr. Paul O’Neill, is now the US Secretary of Treasury, and made the famous speech earlier this year, “the problem with capitalism in this world is not that there is too much capitalism, but too little”.

Such are the issues of moral values, not just economics. Everything for the special interest rather than the national or economic, let alone global interests. Prof. Stiglitz found this was also evident when, for the very first time, there was discussion at the Uruguay Round about intellectual property rights. These are not like natural law, which can represent a balance of interests of consumers and producers alike. The negotiations did not take into account the interests of users in developing and developed countries. The balance was lost during the discussions and designs of these rights. The Office of Science Technology Policy, whose researchers use intellectual property, therefore supported Prof. Stiglitz and his team in the Council of Economic Advisors, in their arguments that the proposed regime might in fact hamper global technological progress. Nobody fully appreciated, till much later, that the simple commercial, paper agreement signed by Trade Ministers only looked at special interests of the drug companies and prevented the African poor from being able to buy the medicines. It was tantamount to a death warrant. The issues were beyond just the trade or commercial aspects, and some amendments had to be effected at a later round of talks on intellectual property rights.

At this stage of the speech at the conference, Professor Stiglitz introduced the economic concept of ‘insonence’. In any policy making decision, some people benefit and others suffer. Depending on how the rules are composed, the balance of who benefits or suffers can change. We were treated with two examples.

**Painting with the same brush**

Global governance systems often fall into the folly of applying the same theorem and formulae to different countries or regions employing diverse trade and economic parameters. Taxation may seem a little distant from globalisation, and it is the value added tax (VAT) that is the case in point here.

The IMF and the World Bank advocacy of implementing VAT is sound, but only in the European context. It is in the main self regulatory and provides low cost and uniform collection of tax. However, if one does not understand the differences in developing countries, one should not be advising the adoption of VAT in those countries. VAT is uniform across all levels of income, and it affects lower income earners more. There is a greater number of low-income earners in developing countries than in developed ones. Prof. Stiglitz feels partly guilty about the use of VAT in developing countries since he advocated its use in his textbooks, but unfortunately some people have not realised the full implications in different circumstances. Collecting taxes is an uphill task for a developing country because of the high proportion of the informal sector. Only about 20-30 percent of the sector is formal. Structured development brings more into the formal sector, easily accessible for collection. A lot of this development occurred with tariff barriers in western nations.

Replacing tariffs with VAT for finance in developing nations would a) stifle growth and development and b) encourage the borderline people to move away from the formal and back into the informal sector. This can also happen in an important industry like coffee, pushing it away from structured development. In the context of globalisation, VAT is not quite the correct application of an otherwise sound system of taxation for a developing country, in the manner it is used in a developed nation.

Another example of misapplication of global governance systems is in developing strategies. For a long period of time, the World Bank has emphasised primary education and also promoted comparative advantage, which in many developing countries happens to be expansion in primary commodities like rubber and coffee. We have seen the price of success of such policies in the global ramifications resulting from the coffee production explosion in Vietnam. More importantly, even in
other countries where the ‘success’ has been much more moderate, the progress becomes static with increased dependency. In contrast, Korea for example focussed on both primary and higher education, and industrial goods. Most of Brazil’s success is also attributed to emphasising education. Often such development is thwarted by unfair trade practices. For instance Canada made an unfounded complaint about foot and mouth disease to stop Brazilian beef exports, when Brazil started making aircraft.

Balancing Changes

So the problems of globalisation affecting developing countries and the coffee industry are intricately related to subjects such as tax and development strategies. What are the solutions? We cannot remove globalisation, it is a fact of life like the economic laws of supply and demand. In any case coffee has benefited from globalisation over the last 400 years. The way forward is to use the market forces and redress the imbalances created by the way globalisation has been administered in the last few decades. Remove the archaic colonial thinking and change the mindset to penetrate the governing structures of international organisations to consider the interests of the developing world. Professor Stiglitz urges ‘a new global compact’ balancing the interests of the developed and the developing.

Some constructive practical suggestions and solutions were presented for immediate implementation. The EU Trade Commissioner has made a bold proposal to remove all trade import barriers to the USA, Japan and Europe, for all goods from the LDCs. Professor Stiglitz strongly supports the immediate implementation of this proposal. LDCs represent only half a percent of world trade, and the removal of barriers would be extremely beneficial for the LDCs. Unfortunately, the proposal has already met some resistance in Europe, and has not yet been discussed in the USA.

Secondly, one should address the unfair lopsided thinking and practices on subsidies, especially for agriculture, which make competition between the developed and developing nations unjust.

Thirdly, change the thinking of bodies like the World Bank and the IMF. In making any development strategies, one should introduce further reaching parameters and strategies into all projects – of recognising national, regional and global consequences.

Fourthly, there should be a new round of trade talks, which redress the past imbalances. This suggestion would face much resistance. Already the USA have said that they first need full compliance of the past agreements. Professor Stiglitz considers this unacceptable and one has to recognise the imbalance for immediate amendment.

Specifically for coffee, Professor Stiglitz advocates the setting up of buffer funds to help countries better handle price volatility, without interfering with their democratic sovereign status. He is not necessarily against cartels but they create distortions and just do not work. However, we already have recognised systems in the developed world of taxing consumers to support agricultural production. Within the context of globalisation, with concerns for the poor being international, there is no reason why the developed nations cannot impose a tax on consumers and extend the principle beyond their borders to support coffee producer prices. Lifting import tariffs and repealing subsidies in developed nations’ farming systems would also even out the platform.

Transparency

There is a myriad of issues said Prof. Stiglitz, and he has spoken of a few, with some possible solutions. The determination of future resolutions of world issues depends entirely on how global
governance evolves. It is extremely important to know a) who has the decision making power, b) how carefully they balance the interests, and c) how effectively they shape the rules and resolutions when they develop the policies and strategies. We need better systems of global governance.

In Professor Stiglitz’s opinion, we currently lack transparency and meaningful participation. There is a lot of discussion about transparency amongst institutions such as the IMF and the World Bank, but even with today’s super technology we often do not have timely information. There is no point in disclosure after the decision. All concerned beneficiaries and participants should be informed and involved in the decision making process. In addition to transparency, governance should include better systems of democratic accountability in terms of voting rights. In most democracies we believe in one person one vote, but in major development agencies the voting power is proportionate to the monetary contribution. This would not matter if the technical issues were of interest only to finance ministries or treasuries. With millions of people’s livelihoods at stake in implementing macro and micro policy decisions, there should be much wider consensus. Today the spectrum of opinion consists only of Central Bank Governors and Finance Ministers in the governing structures of the IMF. An example of undemocratic governance was from Prof. Stiglitz’s personal experience when meeting the President of the USA, who made a remark on a New York Times article about something disagreeable the IMF was doing. The US Secretary of Treasury did not consider it important enough to inform the President, who learnt from a newspaper. And it transpired that the IMF was following the wishes of the US Secretary of Treasury, and obviously not those of the USA.

Similarly, people in political institutions wielding power are more likely to listen to opinions of direct contacts than go out of their way to know relevant grass roots thoughts, or those of the opposition. Governance systems in the U.N. also need to be updated. Current veto powers rest with five countries originally nominated 50 years ago. The opinions of countries that are important today, such as India, are also considered on the same basis as 50 years ago. In the IMF, only one country has effective veto power, one that the speaker called G-1 and asked us to guess.

To conclude, Professor Stiglitz summarised that globalisation is emphatically a powerful force, which has many positive aspects but far outweighed by the negative ones, hurting many countries and especially the poor. As outlined, some radical reforms in systems of governance can change the balance and turn the powerful force of globalisation to positively benefit the less privileged and the developing countries as well. The advice for radical change is to consider how unbalanced the current circumstances are and to shape the future according to the best options for the long term, even if it means revamping the rules. Further changes are bound to occur and they have to be directed for the overall good.

Mr. Robert Thompson, Director of Rural Development at the World Bank, spoke next about the “Strategies in Developing Countries Dependent on Primary Commodities”.

The World Bank is reviewing its strategies on agriculture and rural development. About 1.25 billion people earn less than one US dollar per day, 70 percent are in rural areas and most of them are farmers heavily dependent for cash on export commodities. More than 50 developing countries (especially the Highly Indebted Poor Countries – HIPC) rely on less than three commodities for more than half their export earnings. Eighty percent of export revenue in Africa, 50 percent in Latin America and 25 percent in Asia are derived from agriculture and energy exports. The worst reality is that these low and dependent incomes fluctuate according to the high volatility of international commodity prices, which nowadays can be 50 to 150 percent in as few as one or two years. The risky and capital-intensive business of farming is also further exacerbated by uncertainties of yield and weather. The shocks to the revenue and budgets of farmers and countries are very disruptive, especially when a large proportion of their incomes is for food.
The World Bank’s review of its policies coincides with a trend of decreasing public sector investment in agriculture, and its research and extension. This trend also applies to bilateral donor assistance for development. There is also a tendency for developing countries to have a more urban bias. Private interests have only partly replaced this direction in investment, mostly with an emphasis on commercialised farming. One of the concerns of the policy review is that the World Bank’s new portfolio investment in agriculture has fallen below 10 percent of the total new lending for the first time.

The fall in real commodity prices is a well-known fact. This is partly due to technological changes that have helped productivity and expanded the supply of agricultural commodities, defying earlier predictions that population expansion would create an unfulfillable demand. Agricultural development has been the backbone of the countries that are now developed. Recently published OECD figures show the other main reason for sufficient supply. Farmers in high-income countries have received US$329 billion during the year 2000 (just under one billion per day) of income transfers or subsidies. This is the anomaly, of preaching free-market and practising subsidy. The poor farmers in developing countries do not receive any such financial help and have much more fragile prospects, especially now in the liberalised commodity marketing systems. They still generate a majority of their country’s income and export revenue. Every extra dollar with a developing country’s farmer is more efficiently utilised, and creates a greater employment multiplier, even more than a dollar placed with his fellow poor urban citizen. With the World Bank’s principal mission to reduce poverty, there is every reason to target the poor farmers in developing countries.

Turning to the subject of strategies for developing countries dependent on primary commodities, and the special interest of this Conference for coffee, Mr. Thompson said that the World Bank has not conducted much direct work on tree crops. However, many of the general agricultural principles are applicable to primary commodities.

Technology advances and applications in agriculture have moved on from machinery to intellectual property. Twenty percent of the farmers who produce 80 percent of the world agricultural output are served by private sector investments and have maintained pace with the progress in research and implementation of new ideas. They are also provided with innovative marketing systems to suit their needs. The complete infrastructure is ready to hand and the farmers have the ability to pay.

In complete contrast the poor farmers, who represent the 80 percent producing 20 percent of the output, had their umbrella marketing structure (run by parastatal institutions) removed by liberalisation of the marketing systems. Research and extension were also reduced or removed with this change. The private sector trade and research investment were expected to replace all these functions with more cost efficient, market driven operations to serve the marketing chain to the farmers. While the private traders managed to provide this in terms of a relatively high percentage of the current export price paid to the farmer, they could not smooth over the volatility during the season or give any price fall guarantees. Apart from this, the private sector did not manage to provide the more complete link for the small producers into the regional and national networks, as did the parastatal institutions. As a result, the small farmers have less overall security, cannot access loans for inputs at reasonable cost or receive new planting material in time. The more remote rural farms pay more for inputs (some farmers in western Kenya are paying 500 percent of international fertilisers prices) and receive less for their produce, due to high transport costs. Parastatals used to absorb such costs for remote rural areas. Now the farmers become increasingly marginalised. One can imagine the consequences of falling production or price when these farmers are the majority in number, producing most of the crop in a country dependent on its revenue for foreign exchange.

Some solutions – To achieve better cohesion in the marketing and provision network for the small farmers, the World Bank is trying to find ways to structure farmer associations and producer groups, and for them to become more commercially creative and stimulating, to compete on a more
equal footing in the current environment. Until then farmers can be far more vulnerable to exploitation by middle-men. Many rural communities also need other basic physical infrastructure systems such as better roads and working telephone lines to improve their communications with the world, before moving on to install the more sophisticated Internet technology. Linking this to the phraseology of the first speaker, Mr. Tapscott, the Web design we are looking at here is Aggregation of the small farmers’ produce and input needs, combined with a Distributive Network in both directions.

**Pricing Policy** – International agricultural export commodity prices have always been volatile. Globalisation and trade agreements (for instance the tariff rate quotas subsequent to the Uruguay Round of talks) have increased volatility. Agricultural subsidies in developed countries increase production, and may create oversupply. Coupled with export subsidies, which further depress international prices, the main brunt of the volatility, as well as the actual price, falls squarely on small farmers in developing countries. Buffer stocks do not work to stabilise or to support prices, at a national or an international level. Politicising the access, acquisition and release prices, only builds up production and stock, eventually resulting in a flood that disintegrates the buffer scheme and more deeply deteriorates the actual price and its volatility. Restricting supply by production or marketing controls have also not proved entirely successful.

Clearly the solution at national levels is to create strategies to diversify their economies and reduce their dependency (for farmer incomes, GDP, export revenues) on just one or two export commodities. Non-farm incomes should be developed even in the rural areas. This would be true commercialisation of rural areas and would help build the infrastructure more comprehensively. Farmers in developed countries already have substantial non-land based incomes, 75 percent in the USA, 80 percent in Germany, and 90 percent in Japan. It makes even more sense for small farmers in developing countries, when they have only a very small land area. Usually there is very little possibility to increase this land area. So the only remaining options to increase incomes are to increase productivity and create non-farm incomes.

The World Bank has projects to stabilise incomes through weather and yield risk. The Bank is also active in cooperation with the International Task Force (ITF) on Price Risk. In conjunction with the private sector, traders, banks, academics, and origin institutions, the idea is to find ways to aggregate the small farmers’ price risk and to reduce that risk by hedging in the international futures and options markets. Reducing uncertainties helps farm and family budget planning, facilitates financing and can also enhance incomes. The aggregation occurs through local market intermediaries and the hedging through insurance risk providers, who could be international traders or banks. The provision of such structures would improve the price paid to the farmer, which is otherwise discounted by the market intermediaries to cater for the risks that they take.

Apart from diversification, improving on or off farm incomes, price and weather risk reduction, farmers can also gain from differentiating their product from the generic. This could be special in terms of organic, gourmet or even fair trade. However, such niche markets have limitations in consumer appeal and demand.

To conclude, the Bank is working hard to revise the development strategy for agriculture to assist poor income farmers in developing countries by forming cohesive producer groups or targeting existing ones, and enabling them to use a) improved technology, b) more efficient marketing techniques, c) income risk management and diversification, and also by d) the removal of disincentives through national interventions.

Mr. Thompson agrees with Professor Stiglitz that there are many important aspects at the global policy level, which would enhance livelihoods by broad based economic growth in developing countries. Liberalisation has not benefited them as much as it has the developed nations. Mr. Thompson said that tariff rate quotas from the Uruguay Round Agreement on agriculture have fragmented global markets and accentuated the variability of international prices. He also agrees that
the WTO should conduct negotiations for the reduction of agricultural subsidies in developed nations. Mr. Thompson thinks that there should be a round of talks on agriculture including all commodities and, in order to properly assist developing countries, the talks should include trade off benefits in services and manufactured goods.

Mr. Thompson briefly summarised and then also included some projections. He expects the world population to grow by 50 percent by the middle of this century. With broad based economic growth, many livelihoods and incomes will improve to increase agricultural demand. He also believes that technology advances will allow production to keep pace with demand. Through leads and lags of supply, commodity price volatility will continue. The long-term trend of lower commodity prices will also continue. This will provide low cost food to consumers. Technology progress will also enable higher productivity.

The WTO reaches agreement on the basis of consensus and, unlike the General Agreement on Tariffs and Trade (GATT), the developing countries are the majority in the WTO, so they should negotiate successfully. The World Bank is helping its client members to build capacity for the WTO negotiations. The developing nations should also play their part in development of infrastructures for their farmers. Rather than price intervention measures, governments should follow market-based price and yield risk policies, and encourage other ways for their citizens to enhance incomes.

Panel Discussion on Global Trends

Comments by Mr. Roberto Junguito, Alternate Executive Director at the International Monetary Fund, briefly encapsulated the two speeches as the economic framework 1) explaining some reasons behind the decline of the coffee industry in developing countries, such as the adverse aspects of globalisation, and 2) suggesting policies to prevent further deterioration if not to strengthen the industry, such as improving marketing systems and the use of market based risk management tools to obviate volatility.

Liberalisation of trade and capital flow has resulted in positive economic growth and increased access to the world’s private capital markets, changing the patterns of growth of developing countries. They suffered significant volatility in market access. Due to decreased relative importance of coffee and capital account liberalisation, the producing countries lost a natural hedge, with exchange rates appreciating only when there were high coffee prices. The positive and the negative effects were more intense in Latin America, in middle income producing countries of Brazil and Colombia. African nations were less deeply affected, and some countries missed out on the benefits of capital liberalisation due to lack of market access and lack of incentive. However, many of these countries have benefited from special policies of official debt forgiveness and financial support from the World Bank and the IMF, through the Highly Indebted Poor Countries Initiative.

In the particular case of coffee, globalisation has internationalised brand names and improved choices, but one direct cost that Mr. Junguito pointed out is the concentration of the roasting industry.

There is another important aspect of globalisation to coffee producers that also has further potential risks for policies of the world economy, including the outcomes for industrialised nations. The US led world economic growth and global demand of the past years can only deteriorate from now onwards, and in the near future. As past recessions have shown, this can have a disastrous effect on developing countries. Although income-elasticity of demand for coffee is low, an economic downturn can reduce consumption. Even though coffee prices are quoted in US dollars, a disorderly unwinding of exchange rate misalignments of major currencies (the main consumers) can also be very costly to coffee producers and traders.

6 The initiative has not resulted in debt forgiveness anywhere near the extent intended since developing countries have not attained difficult qualifying measures and pre-conditions for write-off.
On State roles and policies Roberto Junguito fully endorsed Robert Thompson’s suggestions for more intensive use of risk management institutions to reduce coffee-commodity price volatility, since the reintroduction of the ICA price stabilisation using export quotas is not politically viable in the current situation. The few remaining national stabilisation funds, that are effective and successful, such as the Colombian National Coffee Fund, can still continue to play an important role within countries.

Amongst other measures that producer nations can implement, investment in agricultural research and extension (such as high yielding resistant varieties) has a high social return.

More than anything else, in a global economy, the most important role of any State government is to adopt a high quality credible macroeconomic policy and performance. Such realisations will also strengthen the much-needed global governance systems. Specifically for coffee, State controls are costly whereas policies supported and driven by producers are much more successful. Finally, promotion of consumption is the industry’s key, for roasters and producers.

Mr. Rolf W. Boehnke, Managing Director of the Common Fund for Commodities (CFC), was also on the discussion panel for the session on “Global Trends”. His presentation to the Third U.N. Conference on the subject of LDCs, on 17 May 2001, entitled ‘International Trade, Commodities and Services/Tourism’ formed a basis for his comments for the discussion panel at the World Coffee Conference, since there was similarity with the views of the previous two speakers. Factors affecting LDCs also apply to other developing countries.

He made the main points in a logical progression. 1) Trade has significant impact on development. 2) LDCs are reliant on tropical agricultural products and a few minerals for employment, income and export earnings. 3) The LDCs are more vulnerable to external and internal shocks, and especially the price volatility affects small producers in these countries considerably. 4) Declining real commodity prices worsen the terms of trade and exchange of goods. 5) Structural weaknesses in LDCs cause competitive disadvantages and loss of market share despite preferential tariff treatment. 6) Declining revenues increase indebtedness. 7) To halve global poverty by 2015, we must strengthen the commodity sector, the main employer, to raise incomes. 8) Building the comparative advantage of commodities into a stronger sector could provide the base for investment into further diversified growth and industry.

The CFC and the United Nations Conference on Trade and Development (UNCTAD) have prepared seven key actions in conjunction with experts. Under its focus through each commodity, the CFC provides seed money for projects working across many countries, addressing production, processing, marketing and diversification.

1. Enhance production capacity, currently inhibited by structural and supply side constraints. Predominantly small subsistence farms with basic production methods have very limited surplus to take to the market. Without aggregation through farmer groups, individual farmers have difficulty in accessing produce markets, inputs (seeds, fertilizers, pesticides), and obtaining research and extension advice. So to enhance productive capacities we must:
   – Adopt appropriate production technology for small farmers
   – Promote research and development
   – Ensure availability of inputs at the local centres
   – Encourage human and institutional capacity building, and farmer groups
   – Build supportive infrastructure.

7 To add to incomes, rural communities should also be educated to diversify their income bases, farm and non-farm.
There are a few CFC projects currently supporting the above. a) Testing and introducing new disease resistant varieties of high yielding staple banana. b) Developing the use of green/raw jute as a renewable source of raw material for the paper industry. c) Pilot studies on the rehabilitation of coffee and banana production and marketing capacities in countries with civil strife.

2. **Quality and safety standards**, for which health is the main one. Labelling and branding are indispensable to gain market access in today’s world. The CFC is strengthening cooperation with other institutions for harmonisation of national and regional standards and improving capacity for testing and certification.

3. **Post-harvest measures and appropriate storage** to minimise losses which account for up to 33 percent of production in many LDCs. These will increase production capacity.

4. **Horizontal and vertical diversification** could mean domestic value addition, and developing both traditional and new export possibilities, thus deepening and widening the commodity base.
   - Assess feasibility of diversification
   - Increase production and trade in non-traditional items
   - Local processing on small and medium scales to add value
   - Try and develop new uses (may need outside research and technology for this)
   - Increase values of by-products (through simple agro-processing techniques).

   CFC projects are promoting cassava processing, upgrading meat processing, and developing jute reinforced composites.

5. **Marketing and market development** require creation of efficient local and regional markets in current liberalised situations. This involves promotion of commodity exchanges, market intelligence, e-commerce. Improved market infrastructure and support services can all stimulate private sector incentive to invest. Some important points to address are:
   - Differentiate or grade the product and develop different and/or niche markets
   - Investigate possibilities of new regional domestic markets
   - Price discovery, market information and commodity exchanges
   - Consider ways of addressing transport costs and other handicaps of remote landlocked and small island countries.

   The CFC is due to start a project to improve the processing and marketing of value added fisheries in small island countries.

6. **Financing** costs and access are constant hurdles in capital-intensive agriculture production and processing. Support in:
   - Availability of reasonably priced input credit for small farmers
   - Risk management of price volatility
   - Creating incentives to attract foreign direct investments (FDI)

   would enhance sustainable financing possibilities. The CFC projects due to start later this year are to a) test provision of viable input credit to small farmers and b) the possible introduction of price risk management instruments for cocoa, cotton and coffee farmers and their farmer groups in various countries.

---

8 *The CFC is also conducting three market structure improvement projects in Africa. Warehouse warrant financing systems for coffee, cocoa and cotton will also enhance trust and confidence through a legal and regulatory environment for short term trade financing as well as a base for a commodity market or exchange. Structuring market systems would facilitate aggregation of price risk management and weather insurance, thus augmenting access to credit, which is a fundamental element for rural development.*
Strategic partnerships. The CFC with 24 intergovernmental organizations, which focus on individual commodities, International Commodity Bodies (ICBs), with their comparative advantage in global knowledge, have been asked to come forward with viable proposals. Cooperation with other international organizations in field of commodity development can increase synergies and efficiency. All efforts are being made by the CFC to reduce poverty, improve equality, for LDC populations.

Session Two PRIMARY PRODUCTS AND DEVELOPMENT

Chaired by Mr. Arnoldo López Echandi, Ambassador of Costa Rica in Paris

Mr. Paulo Paiva, Vice President for Planning and Administration, Inter-American Development Bank (IDB), on the subject of “Primary Products and the Economic Development of Latin America” spoke first.

Starting with the dynamic role of coffee in building the Latin American countries, Mr. Paiva wanted to explore the challenges in socio-economic importance in the new context of this century. Going through the history since the 1930s crisis, first came the import substitution strategy, then the economic context of the last two centuries, and ended with perspectives of current aspects.

Coffee was the catalytic pillar of economic and social modernisation in growing Latin American countries. In 1925 coffee was 70 percent of Brazil’s and 80 percent of Colombia’s total exports. Coffee produced many subsequent secondary and ripple effects such as the abolition of slavery allowing employment of free immigrant labour. It generated income for investment into other industries and promoted foreign investment in infrastructure. In Colombia coffee still has links into public finances and national politics. It was the vital equilibrium in balance of payments for Latin American countries. Their economies entered world trade, created diversification and domestic demand through coffee.

Industrialisation to substitute imports was the defence to the 1930s global crisis, turning them into closed economies with more State control and emphasis on production of strategic goods and infrastructure. Again coffee was the funding base. The years between 1950 to 1980 saw good growth rates but the insulated economies became inefficient without competition, resulting in budget and trade deficits, high inflation rates and recession.

Brazil’s coffee exports as a percentage of the total went down to 40 percent in 1960, 10 percent in 1980 and 5 percent in 1990. They are 25 percent in Costa Rica and more than 50 percent in El Salvador and higher in Guatemala, although all have seen lower importance since the beginning of the 20th century.

Partly as a result of the crisis after the import substitution strategy, in the last 20 years, there is a new wave of economic globalisation. Mr. Paiva defined this as strengthening market mechanisms, competitiveness and dealing with greater risks. He cited Manuel Castells (2000), who said that this new wave is a new brand of capitalism in which productivity and competitiveness are a function of knowledge-generation and information processing by firms and territories in production, management and distribution networks. These networks are global and the employment is mostly local or regional. Latin American countries must increase productivity by improving skills and technologies. The liberalisation of trade and capital accounts allow exploration of new markets and experiences of international competition.

The roles of States also changed - to achieve fiscal equilibrium and efficient public sectors through privatisation, eventually retaining control of regulation and perhaps public services, but not production.
Today’s Latin America has GDP average annual growth rates below 3 percent, better than the 1.1 percent of the 1980s, but lower than the 5 percent in the 1970s. With current population and income levels, we need to grow at least twice as fast to improve employment. Income levels are becoming more disparate and poverty levels are higher - about 200 million (out of 448 million) people as we start this century. So the economic growth needs to benefit the poor and also be sustainable environmentally.

The future prospects for the coffee industry in Latin America’s economies are dependent on how we attend to the current issues, particularly price and its volatility. New producers have increased supply beyond expectations and thereby decreased marketing abilities of others. Prices cannot recover without immediate growth in demand, and this seems unlikely in the short and medium term. To achieve the competitiveness and to address these problems does not seem easily possible. It is a real crisis.

Similarly, the governments need to pursue fiscal equilibrium under regimes demanding more democracy and transparency, and from different social groups. Therefore support and funding of budgets have to come from a wider spread of elected people. With the roles of governments changing, price support or intervention in private sector programmes become inappropriate.

The current global coffee market structure contributes to lower profitability and incomes. There is greater competition at the pyramid base and a lower proportion of consumer spending reaches the producers. This adds to the lower income trend. Limiting production and export of coffee could theoretically improve marketing strength and incomes, but such agreements are very difficult to reach and more so to implement or enforce. Even if successful, without strict monitoring, the resulting higher prices could be incentive enough to increase production again.

One alternative is to pursue the association of coffee production with social and environmental goals of creating income for the poor producers and conservation of the bio-diversity. Research and technology should be improved to lower production costs and increase the productivity of only the coffee qualities in demand, so as to boost consumption. Alternative uses should also be found to reduce the chances of higher productivity leading again to lower prices. Governments and multilateral companies should directly or indirectly involve themselves in this area.

Cooperation amongst small farmers to form producer groups would also reduce the cost of production and marketing, by collectively buying inputs and marketing coffee. Joint management of funds saved from high-income years could smooth over low-income periods.

Mr. Paiva pledged continued support of the IDB for sustainable regional socio-economic development based on increased efficiency and competitiveness.

There followed a statement by Dr. Juan Manuel Santos Calderon, Minister of Finance and Public Credit of the Republic of Colombia, on “Coffee, Commodities and Economic Development” instead of “Primary Commodity Producers” as programmed.

During the 1970s when the speaker was the permanent representative to the ICO for 10 years, the political attitude of the industrialised nations showed greater sensitivity and leniency towards equitable commodity agreements to achieve remunerative prices for producers. Without opening the debate about the validity of such commodity agreements, one should note that the industrialised countries: a) advocated ending them, b) preached the virtues of free markets and, paradoxically, c) continued to heavily subsidise their own domestic agricultural production and restrict imports. Compare US$8.6 billion coffee-export earnings in the year 2000 with US$361 billion subsidies for
agriculture in 25 OECD countries. The same countries also impose tariffs to protect their own manufacturers, leaving developing countries with little incentive to add value at origin. The only choice is to supply the raw materials.

The speaker addressed the implications of accelerating globalisation in the last 10 years, before proceeding to commodity price stability and the political formulae for better future coffee market governance.

Globalisation has meant growing interdependence, opportunities and expectations of accelerated economic growth. Unfortunately, these expectations have not been achieved in developing countries. Structural deficiencies such as the lack of a) macro-economic stability, b) sound institutional capacity for regulated governance, c) education and human development, d) understanding of the new (globalisation) phenomena, have all caused marginalisation. Real financial crises, as in Asia (1997), showed that the interdependencies have knock on effects and resulted in re-thinking of the concept of liberalisation. Repayments of heavy third world country debts have often diverted resources intended for the creation of competitive infrastructures. Conditions imposed for servicing debts must be re-considered.

Current financial structures make it difficult to implement policies in emerging markets because of potential undue reaction to external factors such as the availability of capital flows, the cost of debt and the overall economic volatility. If such scenarios occurred in developed countries, certain macro-economic policies to counter volatility would be considered sensible. However, the same strategies would be thought inappropriate for emerging markets because of failures of international capital markets in these economies.

In the last decade, the number of poor people in Latin America has remained at 36 percent of the total. Latin American economic growth at 1.3 percent, compared with 5 percent in Asia, is because of lower savings and investments, productivity, labour flexibility and education standards.

Demonstrations and protests at meetings of global organizations in the last few years indicate the need for a new approach to reduce the inequalities in development. To change the nature of globalisation, to attend more to social and environmental problems, with a more balanced approach. Better access to industrialized markets, greater transfer of technology and funds, more sustainable cooperation and investment. The political will of the developed nations has to change to overturn the tariffs on agricultural imports, which cost developing countries US$100 billion every year. Multilateral negotiations with compromises from developed countries are much needed to add new meaning to trade liberalisation. Without this we shall continue sliding quickly into further disparity.

Price instability needs to be countered with risk management and insurance to reduce uncertainty and enhance incomes. Coffee price volatility increased after the end of the economic clauses of the ICA, from 10-12 percent to 50 percent per annum, even more than the 35 percent in the NASDAQ. The other traditional remedy to volatility is diversification, vertical and horizontal. This would require considerable financial and technological investment. Freer marketing of value-added goods from developing countries should also be permitted. The diversification policy also needs commitment for responsible production policies from developing countries to realise and maintain a sustainable balance on the supply side of the equation. Otherwise the results are apparent in the current price of coffee, well below cost of production. Competition to export more does not necessarily increase revenue. The multilateral negotiations, the speaker suggested, need to address issues such as the producer receiving a decreasing proportion of consumer spending, US$12/30 billion 10 years ago to US$8/55 billion today. The marginalisation of developing countries can be in terms of access to markets and capital, as well as trade opportunities and distribution of profits.

The producers and consumers of coffee, and decision-making leaders of the world, cannot afford to remain indifferent to the seriousness of the current situation. The producers have the most responsible task to rationalise the supply of coffee. We need to grasp the opportunities and offers of...
cooperation made at international forums like this one. We have to explore all possibilities including:
1) a return to quotas, 2) may be an increased and more widespread retention, 3) eradication of coffee
farms, and 4) destruction of low-grade coffee. Dr. Santos endorsed the producer initiative, led by the
Colombians, to improve quality. He urged all producing country authorities and industry
representatives to support the scheme.

The speaker also urged active support from all concerned for the ‘New Coffee Era’, launched
by this Conference and the Quebec Declaration at the recent Summit of the Americas held in Canada,
for a concerted and constructive approach to a more regulated coffee industry.

Next was His Excellency Gnassingbe Eyadema, Chairman of the Organisation of African
Unity (OAU), President of Togo. “Coffee and the Economic Development of Africa”.

His Excellency Agbeyome Messan Kodjo, the Prime Minister of Togo, informed the audience
that President Eyadema was unable to attend the Conference on account of other duties in Lomé, for
various crises in the Great Lakes region and the countries of the Mano river basin. The following
message (summarised in this report) is from him:

The dawn of the third millennium brings crisis to the worried coffee producers worldwide and
to the declining African production, quality and markets. We are fortunate to have this forum to find
solutions.

About 33 million people, in 25 African countries, derive their livelihoods by growing coffee
(on about 4.5 million square kilometres of land), predominantly Robusta but also Arabica. Despite
fertile soils, yields per hectare are half those in Asia and Latin America, around 250 to
340 kilograms/hectare compared to 594-611 kilograms/hectare. Annual export earnings have fallen
from US$8 to US$3 billion.

Pressure from Bretton Woods institutions on the parastatal marketing boards to liberalise the
coffee sector has brought us this difficult situation. Without the caisses de stabilisation, the free
economic laws of supply and demand have worked against African developing countries. Contrary to
expectations, globalisation and liberalisation created a very difficult marketing situation for African
farmers, in having to deal directly with private unknown operators. The result has been to the
farmers’ detriment, with disastrous drops in their incomes, spreading rural poverty with a crisis of
unprecedented dimensions.

Previously, the world coffee trade was suitably regulated using quotas under the ICA
economic clauses. The Interafircan Coffee Organisation (IACO) worked with a consultative group in
the ICO Council within a framework of indicator prices, with floors and ceilings, allowing release or
withdrawal of quantity. This system allowed producers and consumers to work within those rules,
reconcile positions, and stabilise the market fairly in the interests of all parties. The suspension of the
economic clauses of the ICA in 1989, liberalisation and globalisation, allowed the strong
manufacturing consumer interests to form cartels in a scenario of falling prices and severe
competition amongst producers.

African farmers also received less or no assistance in grants, loans or technical extension from
their national institutions after liberalisation. Rehabilitation of ageing coffee farms, outbreaks of new
diseases and continued attacks of pests are all aspects that growers needed to solve. Such factors also
contributed to lower quality and production. African production, as a percentage of the total, fell from
30 percent in the 1960s to 17 percent in 2000/01. With prices also going lower, now below cost of
production, the African motivation has dwindled with the declining revenues. Most African
producers are dependent on coffee for more than 60 percent (and up to 90 percent in some cases) of their export earnings. African farmers feel helpless in a situation controlled by others in the market chain.

President Eyadema said Africa is convinced that the ethos of trade cooperation needs to be completely revised, with greater say and participation of the producers. The more powerful and knowledgeable multinationals and their affluent countries should have a sense of duty to help African coffee authorities improve producer revenues. This should include improvements such as high performance plant material in production through research and extension, as well as value added processing, which includes producing better quality green coffee beans. Better revenues will help better planning of State budgets and debt repayments.

Africa is asking for technical and financial assistance for structural development, through institutions such as the IACO, to form a consolidated instrument for African coffee cooperation in research, production, processing, exports and consumption. The IACO is actively promoting coffee consumption in producing and non-producing African countries. This is in addition to the support for ICO efforts in generic promotion in traditional and emerging markets such as China and Russia. The IACO can also help link African coffee research to the world network.

With today’s liberalised conditions, Africa will concentrate the funds received from the financial agencies towards the private sector. They too can become involved in research, developing cultivation practices, and training a new generation of farmers towards competitive rural commercialisation. In conclusion, President Eyadema summarised all the above aspects that he spoke about and need to be addressed for the future of African development.

Dr. Supachai Panitchpakdi, former Deputy Prime Minister and Minister of Commerce, Thailand, and Director General designate, World Trade Organization, on “Agriculture, Coffee and the Economic Development of Asia”.

Dr. Supachai Panitchpakdi did not like the idea of his speech breaking up the coffee break, so he said that Life should be a continuous coffee break. What a delightful idea!

The aim of the speech is to study the situation in coffee and other major agricultural commodities in Asia and the projects that can be conducted under the ICO to benefit the deserving world’s growers. Dr. Panitchpakdi thinks of wine being very similar in many respects to coffee as a product, and wonders why the standards of living of coffee growers cannot be brought close to those of the wine growers.

Agricultural development in Asia: Dr. Panitchpakdi made five points that he thought would harmonise well with the aim of improving the quality, marketing and image of coffee. The Asian experience has a slightly different character to the one we have heard for Latin America and Africa.

1) The Asian agriculture sector has absorbed a considerable number of modern technologies from seeds to brands. 2) The efficiency of the farmers has produced excess to national domestic requirement, making many countries lean more towards world trade and markets for outlets. So an increasing number of economies – India, China, Vietnam and Indonesia – are becoming major agriculture crop and food grain traders. 3) Prolonged lower prices of agricultural goods worldwide, particularly in the last five years, have also forced Asian farmers to diversify, rice to corn and tapioca to soya beans, some rubber and now coffee. This diversification is producing duplication of farming ‘new’ crops in an Asian country, which are already being produced in abundance elsewhere within Asia. This leads to increasing competition. Thailand never did produce much coffee, but a lot of rubber plantations switched because of low rubber prices. 4) The US$360 billion farm subsidies in OECD countries are highly excessive and wasteful of countries professing free trade. It is definitely a subject that needs to be resolved in the next round of the WTO trade negotiations. 5) The competition
at the farm production level also creates the need to process agricultural crops to add value and improve the chances of being more competitive in the world market. However, the same countries that advocate free trade also impose tariffs. Tariff escalations mean that more the value added, higher the tariff.

Let us now take those agricultural trends and problems in Asia, into the coffee industry. The course of diversification has pushed a lot of new investment into coffee during years when prices must have been very remunerative\(^9\). This has occurred in many different areas with fertile land where coffee can be grown in Asia. The trend is especially strong in Vietnam and to a lesser extent in Thailand. Asia has become a major producer, especially in Robusta.

Without international coordination, agreements or cooperation to check the excessive supply, the declining prices are bound to result in a situation full of difficult issues. We need international accord so that we do not destroy the market to our detriment. The predictions of international institutions, including the FAO, indicate that supply is exceeding demand by about 10 million bags until the year 2005.

The solutions under discussion at this meeting and other forums should fall under the following three main headings: to limit supply, to increase demand, and thirdly to improve the quality.

To limit supply, the Association of Coffee Producing Countries (ACPC) has introduced the retention scheme with the intention of building stocks in the producing countries. However, markets have shown a greater tendency for prices to decline with stocks sitting at the consumer end of the chain. Unfortunately, the ACPC does not have any independent supervisory body to ensure that all countries are abiding by the plan. Secondly we need to be more scientific and methodical on how we limit supply of coffee for drinking by finding other uses, especially for the lower qualities. Export qualities need to have minimum standards to prevent the lower qualities from reducing export prices.

To increase demand, the consumer needs to be educated further and deeper. Advertising and coffee promotion festivals are continuing in the usual markets and are having beneficial effects in Asia, especially in China. With higher incomes and increasing consumption of coffee, the potentials in the Chinese economy are enormous. China and Vietnam may soon enter the WTO membership.

To upgrade production techniques and improve the quality, the new ICA emphasises the development of a sustainable coffee economy. This involves ensuring efficiency in terms of production and preservation of the environment. It is also necessary to ensure economic returns for producers and guarantee good quality for the consumers. There are organisations such as the United Nations Environment Programme (UNEP), the International Trade Centre (ITC), which is under the UNCTAD and the WTO, that have been working in conjunction with the private sector in coffee projects. Dr. Panitchpakdi said that he would personally be able to increase the scope of two aspects that have been working well through the institutions mentioned. The Internet auction of coffee successfully allowed more direct marketing and we can try to promote global participation.

The ITC can continue to work more closely with the Specialty Coffee Association of America and the All Japan Coffee Association with the premium coffees and bring similar differentiation as we have in the wine market. Such differentials should give the incentive for farmers to grow less low quality and move into higher qualities. Although the speaker is not starting at the WTO until September 2002, he hopes to start working with the ITC/UNCTAD and the growing nations to improve the organisation in the world trade of coffee.

---

\(^9\) After lowest levels in 1993, during 1994 to 1998, prices rose slightly subsequent to the formation of the ACPC and sharply after the two Brazilian frosts in June 1994. Lower reasonable prices in 1995 were again volatile up to 1998. The El Niño caused disturbance through untimely drought or rain, particularly for many Arabica producers, rendering the price difference / arbitrage with Robustas at its highest.
Conference Luncheon

At the Conference Luncheon, 18 May 2001, sponsored by Neumann Kaffe Gruppe, the guest speaker was Mr. Brian Williamson, Chairman, London International Financial Futures and Options Exchange (LIFFE), on “The Role and Performance of Futures Markets in Coffee”.

This speaker drew similarities with the crisis position of LIFFE, which was in an environment of low sentiment two years ago, and the coffee prices now at their 30 year lows. From his experiences, Mr. Williamson warned us of the difficulties. Planning is one thing and implementing those plans quite another. Mr. Williamson reminded us of the immense importance of information technology in today’s world.

Changes in Exchange

World markets, whether commodity, equity or financial, are being shaped by increased technological application. Apparently, development of new technology brought about competition of an unforeseen nature, creating difficulties for LIFFE in their ability to continue their futures market operations in the traditional manner. By offering facilities for the conduct of trade electronically, technology allowed distant brokerage units (perhaps trading with the main exchange) the possibility to replicate the characteristics of an exchange at low cost. This also gave the investors and professionals a better service in terms of cheaper, efficient, flexible and faster international trading opportunities. However, the trust and assurance with liquidity that any successful exchange provides for the market participants became fragmented. The problems and challenges presented to LIFFE were also overcome by technology. The solution was the direction of all the dispersed business through investment in technology, in the central hub of the exchange providing the liquidity.

Another lesson we have to learn from the increased use of the Internet is that the ownership of any product or idea becomes more diffused. Rather than protect any franchises, established exchanges (and other organisations) should embrace the change and capitalise on their core strengths as trusted operators of safe and secure liquid markets. The potential competitors would have to blend into the technology rich exchange.

An important aspect of the process was the cultural change, the restructuring of the personnel and the organisation into a purely commercial business, effectively providing the needs of the customers. Ensuring an explicit motive for profit at every stage of the change also helped the exchange to maximise the true potential of the business. For instance, one of the radical changes was to allow interested outside investors to participate directly in the exchange. Previously this was restricted to member shareholders. This change required strict commercial disciplines to be imposed.

Mentioned above are the main principles relevant to future plans for the coffee industry. The speaker then went into the details of the sophisticated services that the rich technology (with the trademark LIFFE CONNECT) offered. There is an enormous variety of derivative products offered on one electronic platform. Commodities such as coffee, cocoa and sugar being traded alongside bonds and equities; and ‘implied pricing’ providing markets for spread and multi-month trades in interest rate futures. The result is greater depth and liquidity now in coffee and all products, with record volumes of 2 million contracts per day for LIFFE. Global communication networks, also used by world’s airlines, allow equal access of the trading system from all over the world.

This speech ended with a more relevant potential for the coffee industry: the possibility of using the same systems for e-commerce, electronically connecting the global trading of physical goods as well as the futures contracts\(^\text{10}\).

\(^{10}\) Eventually this can link organised farmers as well as trade.
Session Three  MAJOR SUPPLY AND DEMAND TRENDS

Chaired by Mr. Michael Neumann, Chairman of the Board of Management, Neumann Gruppe GmbH

Mr. Neumann congratulated the previous two sessions’ speakers on the enlightening insights of macro topics for the global, political and economic framework of the coffee industry. This third session is closer to the actual subject of coffee and its future outlook.

After introducing the various speakers in this session, Mr. Neumann continued with a merchant proverb, which he called German but is more universal: “A business is a truly good business only when it is good for all the parties”. The current scenario is not good for the producers and can have knock on effects for the rest of the coffee industry. Our aim is to alleviate the present crisis and avoid repetition.

Today’s situation is not entirely a result of the usual cyclical pattern. Growing world demand could have absorbed the usual small increase in production generated by the high prices of 1994-1997. The causes of the current crisis are unique structural changes – the end of the cold (economic) war, the free market situation and increasing globalisation. International donor (World Bank) organisation advice produced the phenomenon called ‘Doimoi’ in Vietnam. Nobody thought of who will consume the extra coffee, or perhaps they did not realise the results would be so ‘successful’. In addition, the favourable economy in Brazil, with reduced inflation, a free coffee market, sophisticated growing and management techniques, all contributed to increased productivity. The efficiency produced an astonishing result of 30 percent more production on 33 percent less planted area. Brazil and Vietnam contribute 20 million bags more to the supply side of the equation, a 20 percent increase for the world production.

The global increase in consumption per annum seems to have risen from 1-1.5 million bags in the last decade to about 2 million bags. Mr. Neumann optimistically thinks that four more years of increasing consumption will absorb the extra production. He predicts that many countries cannot afford to produce the same quantities with market prices well below the cost of production.

Mr. Jorge Esteve, Conselho dos Exportadores de Café Verde do Brasil, then quickly gave his prepared PowerPoint data about the Brazilian coffee industry and presented three practical proposals for the future strategy of the coffee industry. In the last 10 years, the private sector has taken over the roles usually played by consumer country governments. Major global corporations, some dedicated green coffee traders and NGOs have adopted these responsibilities. The world has changed in the years after the ICO quota days, and we must change with it. Improved communication has also made consumers much more aware of the producers’ plight. Globalisation has ensured that producers and consumers work together and no longer as antagonists. Responsible or ethical trading, incorporating social and ecological sustainability, is a must for all concerned in the public and private sector. Above all, growers deserve a remunerative price. This does not, however, mean a politically motivated artificial level. So the public and private sector partnerships working with sustainable development goals present the first scenario.

The second suggestion is to introduce the pattern of contract farming into the value chain, with delivery, quality and payment assured through producer State government regulations and

---

11 An example could be a vertical cooperation chain of producer group > green coffee trader > branded coffee manufacturer and > a supermarket distribution network.
international donor organisation intervention. By ensuring that, at the time of making the initial decision to grow coffee and plant the seedlings, the farmers know the investment risk and future returns four years down the road. Widespread use of this system would greatly reduce the volatility.\(^{12}\)

The third idea is to introduce ‘cyber-farming’ of coffee. Increasing numbers of people are connected ‘on-line’ in this age of knowledge and information. Today’s coffee farmer still guesses and speculates when making his/her investment decision. By connecting the rural areas with information technology, the farmers would have access to knowledge about different varieties, their characteristics, whether and when he should irrigate or spray. There can also be exchange of information on a countrywide, regional and intercontinental basis on various subjects, such as research, farm practices, weather, soils and costs of production.

The funding would be from private and public partnerships. The speaker already knows of interested corporations and donor organisations. The monitoring would have to be neutral, perhaps a university. Information should be made available at nominal cost to farmers, traders, banks and roasters.

There would be many benefits. Some examples are: rational investment decisions by farmers; stability in incomes and planning for farmers, banks, governments; and best of all – steadier production, supply and price patterns for the entire coffee industry.

Mr. Doug Burns of Kraft Foods International, Brentford (USA), talked next about “Growth in the Global Coffee Industry”.

Mr. Burns talked about growth led by an increase in consumption. The industry needs to grow and it should be the collective mission for all of us. This requires commitment and contribution from the entire industry. The leadership and investment from brand manufacturers can pave the path and everybody needs to have the willingness to embrace the changes.

A graph of global consumption since 1850 showed that, apart from a sharp decline in the late 1930s depression, global demand has been rising at a steady average rate of about 1 million bags (about 60,000 tonnes) per annum. In the last 10 years, the increase has been 1.5 to 2.0 million bags per annum. The projections for the next 10 years are slightly higher, about 2 million bags per annum. Demand is predictable and steadily rising.

Global market shares of roasters have consolidated and will continue to do so. From a situation of hundreds of small roasters in each main consuming country, there is now a global market dominated by just a few. Just three corporations market more than 45 percent of the coffee. However, the main point to note is that all of them and the entire coffee industry have a common goal, that of increasing consumption. This is easy to say but the competition is becoming tougher. Even the mighty Coca-Cola has billions of US$ market share taken away by the relatively new Red Bull.

**Promoting Consumption**

Powerful brands are the primary weapons. For coffee, this means providing what the consumer dictates: high quality, in a variety of forms (beans, ground, or instant, liquid concentrate), different packaging (re-sealable, vacuum, tin, jar), organic or decaffeinated formulation, and convenience (coffee mix with creamer and sugar); all depending on how the consumer wants to

---

\(^{12}\) This idea takes the World Bank projects for price risk management a few stages further. A scheme like this would require considerable detail over a long time span to implement effectively. Most contract farming is very short term, just a few months. However, if successful, volatility would be greatly reduced.
participate. A good brand is more than just a product. Beyond the function of the product, the brand has to infuse into the consumer’s life with a long and lasting identity. Kraft spends US$200 million in advertising to create that personal bond.

The equation of the cycle of investment has to work. The additional brand loyalty should increase consumption sufficiently to allow reinvestment in technology. The speaker showed two advertisements that have been successful for the last 15 years in France and the Nordic countries in the growth of the premium segment. Growth through branding also has to be mindful of trends such as increased consumption away from home, bringing challenges of how to increase home consumption.

The willingness and commitment of all participants, from producers to the roasters, have to be harmonised and directed to the consumer needs and desires. Four main areas need to be addressed. Volatility can be destructive in driving away the consumer. The consumer cannot be forced to like a product purely through promotions or advertisement. Quality is the key. Continued free movement of goods for promotion in new market areas is necessary. Lastly, raise the standards of global governance to be world class to harmonise with and build trust in local environments. To achieve success in a competitive world requires a willingness to embrace change. The status quo may be a nice world we live in but it is bound to change. We may as well participate in that change for better direction.

Mr. Gordon Gillett of Nestlé SA Vevey, Senior Vice President, Nestec Ltd., made the next presentation on “Growing the World’s Coffee Consumption – Nescafé, a Global Brand Opening up New and Increasing Coffee Demand”.

Mr. Gordon Gillett talked about the underlying trend in world consumption, and Nestlé’s contribution to its steady expansion. Foremost, he emphasized the importance of steady supply of quality raw material to support Nestlé’s constant drive for product innovation and renovation. Nestlé’s concern for consistency is greater since they have 14 manufacturing units in producing and emerging markets. Investment confidence requires sound economic climate, open trade environment and a steady rise in local consumer purchasing power. Nestlé’s success is also due to efforts to reduce costs with technology and production efficiency, both without sacrificing quality. Low cost efficiency in Vietnam and Brazil should be viewed as benchmarks rather than culprits of the current crisis. Not underestimating the current structural problems in the market, there is little hope of price stabilisation returning or the retention scheme working. Opening up new markets for increased consumption can be one of the main solutions.

Global growth in demand of coffee on average has been a steady 1 to 2 percent per annum. Demand has declined during years of price increases in the last 35 years, but this has occurred 11 times and never lasted more than two years. Nestlé’s usage was up 88 percent from 1980 to 2000, 6.5 to 12.2 million bags, whereas world usage was up 32 percent from 80 to 105.5 million bags. The overall consumption growth between 1990 and 1999 has been the greatest in producing countries and emerging markets. In North America and Western Europe the consumption has declined slightly. While consumption of soluble coffee has declined much more in North America compared with roast and ground (R+G) coffee, soluble has excelled in producing countries and emerging markets, especially the latter. Nowadays the producing countries and emerging markets have the largest share of the global market. Russia and Mexico have the biggest expansion and are fourth and fifth in the top 10 soluble consuming countries, which account for 60 percent of the soluble market.

To promote consumption, the product must be competitively priced, affordable and be adapted to suit local market characteristics. Therefore pricing a quality product in low-income countries is especially difficult. A mean average chart plot of Income against Coffee Consumption
per capita shows the world income at about US$6,800 per annum, and consumption at about 1 kg per person per annum. There is plenty of room for growth in the world per capita consumption, and the speaker said the graph projected 2 kg per person per annum when average incomes double.

Mr. Gillett mentioned some of the characteristics and the methods of promotion. For mature markets with higher expendable incomes, price is less relevant than for the product to be modern, visible and attractive. With an ageing population, the competition with other beverages is to target the younger generation. In an emerging market such as Russia, the solution is to improve availability to the consumer through a better distribution network. In terms of affordability and convenience, the single sachet with soluble coffee, creamer and sugar proves to be successful in other emerging markets such as the Far East.

The forecast is for the world consumption to be 115-120 million bags in the year 2005.

Mr. Robert F. Nelson, President and Chief Executive Officer, National Coffee Association of USA (NCA), “US Coffee Trends: 1991 to 2001”.

In the last decade there are about 25 million new occasional consumers and a couple of million new daily drinkers. This is because of expansion of the coffee menu from the previous choice of regular blend, decaffeinated or instant, to a vast array of gourmet varieties, degrees of roast, flavoured coffees, espresso based and iced beverages with different packages from cans to bottles.

The number and types of outlets have also increased – carts, vending machines, coffee houses and bookstores. The specialty focus on quality has promoted the beverage from a staple drink to a gourmet level – from 3 percent of the adult population in 1997, claiming 7 million drinkers, to 14 percent and 29 million drinkers in 2001. From 35 percent of the total adult population or 80 million in 1997, the occasional consumers of specialty coffee have jumped to 62 percent or 127 million people. The number of adults who drink the roast and ground premium gourmet coffee at least once a day has doubled in the last year (2000-01) to 10 percent or 20 million adults.

All this activity has of course made the consumer much more aware of the special grade, variety, origin and method of growth (shade or sun). The successful introduction of iced bottled coffee expands the horizon to share a part of the cold drinks market as well. The move to gourmet has shifted the emphasis of coffee as a beverage for the quality aware customer rather than a price conscious one. The future is positive.

The paper “Coffee – the Next Five Years” prepared by Mr. Helmut Ahlfeld, Managing Director of F.O. Licht, Germany, was delivered by Mr. Donald Spence, since Mr. Ahlfeld was ill.

To begin, the paper reiterates the steady consumption rise, and graphs illustrate the relationship of consumption rising with incomes until satisfaction saturation is reached, which of course is different in each individual and varies with climate and culture. However, a few people’s very high income weighs on the average. In reality there are more people below the average world income.

The high-income earners in mature markets may drink improved quality coffee but not necessarily increase the quantity. But rises in incomes at lower or middle-income levels, in coffee drinking emerging markets\textsuperscript{13}, can increase consumption more rapidly. This would also apply to

\textsuperscript{13} There is considerable scope for higher consumption in countries with large and expanding middle income brackets such as India, Mexico.
traditional consumer countries such as Greece, Italy and Spain. There are possibilities in traditional and saturated markets, with more evenly distributed reasonably high incomes, to increase value if not quantity.

The other factors influencing consumption are population levels and the rates of population increase. These could also be through immigration. Here again, the scope for increase is greater in emerging markets with large or expanding populations and more people adopting urban lifestyles.

After making assumptions about the potential real inflation adjusted incomes, no change in real retail prices, steady exchange rates, Mr. Ahlfeld projects an increase in consumption of 4.3 million bags or 4.2 percent by the year 2005. This would result in total consumption of not more than 110 million bags.

Assuming price levels at the year 2000 average, unchanged exchange rates, and constant area under production, the supply is projected to rise by 5.2 percent, from 114 to 120 million bags. The current prices will not persuade many farmers to uproot the perennial coffee bushes. They will continue harvesting even if they stop tending the bushes with inputs (including physical work like pruning), as long as the income is higher than the cost of harvesting. The low cost producers, Brazil and Vietnam, will continue harvesting 40 and 15 million bags respectively. Other new ones such as Cambodia, Laos and Myanmar may become major producers.

One major impact of not tending their bushes and attempts at reducing harvest and post-harvest costs is that it will definitely deteriorate quality. Prices are less dependent on fundamentals of supply, demand, production and stocks than they used to be. This is partly due to roaster technology and adaptability in being able to produce the same shelf taste with slight variations, such as origin or blend and perhaps using a little Robusta. However, fundamentals still have a significant influence and the excessive supply, tied with other sentiments, will keep prices low.

Panel Discussion on Supply and Demand

Mr. Klaus Jacobs, Klaus Jacobs Foundation, Switzerland, urged us to join his Colombian and other coffee friends in trying to find solutions for the price crisis and also to promote coffee (the fuel of civilisation) to the new young consumers and discourage drugs (the cancer of civilisation).

Mr. Jacobs forecast that in 2-3 years’ time, production would be at 120 million bags per annum, consumption at 108 million bags. Stocks would therefore increase to about 70 million bags and futures market prices fall to 40 cents per pound in New York and 10 cents per pound ($110 per tonne) in London. There may be a frost or natural disaster but then Mr. Jacobs says there may even be a medical or other negative publicity affecting coffee consumption.

---

14 There is a tendency for quality to decline through less care when prices are rampantly high and traders are eager to fulfil their commitments by buying any material from farmers. Farmers exercise greater care when conditions are more stable and yet competitive, at prices above the cost of production. When prices are well below production cost, there is little choice but to let go and sacrifice the more expensive quality production techniques.

15 The speculative element of hedge funds participating in coffee futures reduces the impact of fundamentals by cumulatively trending the movement and volatility of prices with the computer programmes through which the funds operate.
As a businessman rather than a politician or scientist or coffee farmer, Mr. Jacobs always strove to market coffee for its intrinsic quality as a fuel for civilisation and for the dreams and desires of consumers. In competition with other beverages, coffee has produced: a) ‘Kronung’ in Germany and ‘Carte Noire’ in France (a traditional Robusta market) from Jacobs Suchard, b) Starbucks introduced a new culture; c) Lavazza and Illy spread the Italian espresso excellence, d) Colombia presented ‘Juan Valdez’ as the trusted farmer, and e) Nespresso is Nescafé’s proof of continued innovation.

Dreams and desires have to be created for the consumers as a bond to achieve deserving shelf prices. Competitive production costs, as in Vietnam, can also continue to provide the price conscious consumer product. The advice to farmers is to try and establish their produce as the best value high quality with a difference, to achieve super prices. If this does not seem possible, one has to cut costs to compete with other producers of similar produce. If neither is possible, reduce or divert the investment in the best interest of the family livelihood. Family sustainability should always be the priority. The radical solution may be to reduce coffee trees producing less desirable qualities and plant forests instead – in any practical manner, adjust the production to suit the consumption during the new ICA.

Mr. Michael Wheeler, Overseas Representative, Papua New Guinea (PNG) Coffee Industry Corporation, took further the subject of the change in fundamentals or different factors affecting the price, and therefore the need for a change in approach. Supply has exceeded demand for the last three years and stocks are more than 50 million bags today. They were at 73 million bags in 1992 and also more than 50 million bags in the 1980s. Why then are prices today lower than ever? The speculative element is the usual scapegoat. However, Mr. Wheeler believes that the changed fundamentals do act on the market.

**Changing fundamentals:** On the production side we have varieties such as the Catimor, which is productive two years earlier than other varieties, and with a slightly lower but very useable quality. There are also new methods of planting, weeding, pruning and harvesting. Transport systems and bulk packaging have reduced costs and time, allowing efficient just in time logistics. Large trade and export houses at origins now also process and some even grow coffee. They have built efficient vertically integrated chains. On the roasting side there are advances in machinery and management. New processing techniques such as steam cleaning allow use of lower qualities. There have also been changes in information technology at both ends. The farmer in Papua New Guinea may not have a computer link to the Internet but he/she is much more aware of major price development on a daily rather than a seasonal basis. Much more and perhaps almost all coffee at origin is hedged and therefore the effect is felt earlier in international prices.

**Considering solutions:** Prices would have been lower earlier without the retention scheme. In that sense the retention scheme has some merits. However, Mr. Wheeler thinks the scheme to be fundamentally flawed in the long term. Instead, the concept of diverting triage (broken beans) coffee, one of the lowest value grade, into other uses would be a better solution. This would a) deal with the current surplus, b) provide quality, c) enhance alternative incomes, and d) be a longer term solution. Some ICO projects are studying various alternative uses, which would be value added and not return this grade into the coffee marketing chain. Making briquettes for fuel from coffee husk and parchment is one example. The protests about removal of triage affecting soluble manufacture do not come from the soluble industry, but other people. The soluble green bean procurers buy the cheaper triage only when the intrinsic quality is also suitable. The soluble market has also moved into better qualities over the years and needs better raw material.

The problems envisaged in diverting low quality coffees are financing the diversion and the time it would take for all the governments to agree and comply. Some may not agree. The ‘free-riders’ can spoil the entire scheme. PNG is one of the ‘free-rider’ culprits in the retention scheme, which would have been more successful with more producing countries participating. The other
aspect that needs scrutiny in any supply-regulating scheme, is creditable monitoring. This was one of the failings of the retention scheme. Even during the ICO quota days, stock verification with international auditors proved difficult. Perhaps the best system would be to select domestic umpires who would also monitor the situation in other countries.

Mr. Ong Siong Kai, Chief Executive, Hiang Kie Group, Singapore, talked next about “Coffee – an Asian Perspective”.

Despite increasing wisdom, experience, transparency, the industry is still in the situation of not being able to manage supply. Perhaps we may never see that long term balance with demand. The only time we have seen some semblance of balance has been during the ICA with economic clauses. During this time, the London and New York coffee futures markets grew in prominence and built closer co-relationship with physical coffee prices. Today, most coffee is traded on differential or price to be fixed basis to the futures markets. Some Arabica origins are trying to break away and return to outright prices relevant to the intrinsic quality. In other commodities, such as pepper and tea, traded with far less emphasis on futures markets, the price variation and stability is provided by the number of players, traders and brokers, all providing equilibrium through their varying opinions.

Mr. Kai joined his father’s business 36 years ago, and one of the progressive strategies has been to add value by buying a decaffeination plant, the only one in Asia and Australasia. Others have entered into vaporising lower quality Robustas. The Hiang Kie Group has also diversified by acquiring specialty cafés and restaurants. Meanwhile small companies have succumbed to competition from larger firms, and even some big firms have disappeared or have been restructured.

Asia has seen enormous growth of Robusta production. One of the panaceas to economic growth for countries such as Vietnam has become a plague, as farmers struggle to harvest, unable to afford to hire pickers in today’s coffee prices. The Vietnamese Coffee Association is recommending expansion, if there is to be any, into Arabica. However, Brazil is already producing half the world’s requirement of Arabica. So what is the answer for Vietnam and many other developing countries, with other commodity and food crop prices also at low levels?

One idea for a different approach is in trading coffee at a differential to the futures markets. We should think about having pre-agreed changes in differentials when the futures market changes significantly into another price bracket, up or down\textsuperscript{16}. Otherwise, one could also de-link the price altogether to the futures and trade outright\textsuperscript{17}.

There are many success stories in the coffee industry and the Starbucks success has given a boost overall to the industry by promoting gourmet type of coffees. So all is not doom and gloom.

Mr. Roel Vaessen, Secretary General of the European Coffee Federation (ECF), spoke about “Coffee Trends in Europe”.

Figures from the Bureau of Statistics show that the EU imports in the year 2000 are down by 1.7 percent from 1999 and, at 36.8 million bags per annum, are still about half the world’s exports. In money terms 3.3 percent down at 4.1 billion euros, but still not as much as the fall in the ICO

\textsuperscript{16} A good idea for the market to try and decide. This may decrease the inter-trader price differential risk, but also reduce flexibility in the timing of sale to a roaster. There would be no particular benefit or application for the farmer.

\textsuperscript{17} This is already practised for the gourmet and very low quality coffees, not so fungible to the futures markets. For other coffees, it could increase risk and be difficult to revert to, now that the trend to trade physical coffees at differentials to the futures markets has already been established.
indicator prices. The main four importers (not consumers) are Germany, Italy, France, Spain and then others. The main suppliers are Brazil (23 percent), Vietnam (13 percent), Colombia (9 percent), India (5 percent) and Uganda (5 percent).

The main major trend in Europe is concern for food safety. There have been many food scares: BSE (mad cow disease), Dioxin, Salmonella, Foot and Mouth. The main consequences have been eroding consumer confidence and installing stricter legislation from ‘farm to fork’. The food consumer safety is oriented from the EU viewpoint, for food produced and consumed within the EU. For this the new hazard analysis at critical control points (HACCP) is being developed from ‘farm to fork’ for all raw material and finished product. How they will eventually treat tropical crops such as coffee, which is produced more than 2,000 miles away, will depend on the comprehensiveness of the EU approach, which currently is very vigorous. The origin and production of the ingredients as well as the process of manufacturing will be scrutinised. This will involve and require the cooperation of the entire chain from the many growers, processors, traders, transporters, shipping containers, import and export warehouses, roasters, and distributors. There will have to be an audit trail for traceability.

Mr. Đoàn Triêu Nhan, Chairman, Vietnam Coffee and Cocoa Association, spoke about the “Orientations of Vietnam Coffee Industry”.

Although coffee was first grown in Vietnam 145 years ago, and there were plans for expansion in 1910, there was substantial growth only after 1975, when the area of 20,000 hectares produced about 6,000 tonnes of green coffee. Today there are more than 500,000 hectares, mainly under Robusta coffee, producing more than 700,000 tonnes. There are plans to focus now on development in suitable areas for Arabica, particularly in the north.

The early expansion took place in the western highlands provinces of DakLak, Gia Lai, Kontum, Lam Dong and some in the more hot and humid south-eastern provinces of Dong Nai, Ba Ria, Vung Tau, Bihn Phuoc, and some central coastal areas, mainly on basaltic soils with high natural fertility. West has two seasons, wet and dry, the latter for 4-5 months, November to April, when the coffee is harvested and dried. Productivity per hectare has increased fourfold by irrigating at critical periods to promote coffee blossom and fruit cherry development. With adequate fertiliser, yields of 3-4 tonnes per hectare are achieved.

The government policy of providing land, housing and other socio-economic programmes has facilitated production and trading. The three main international trading groups are ED+F Man, Neumann Gruppe and Olam.

The high prices in 1994 to 1998 encouraged expansion at the rate of 30,000 hectares per annum, doubling the 1995/96 production of nearly 400,000 tonnes within 5 years. This was beyond all expectations, including the government policy makers. This caused problems of insufficient harvesting and processing capacity, and also of unforeseen market expansion. The government has also realised that the north is better suited for Arabica production.

The future strategy is to improve quality, reduce production costs, grow the more suitable varieties adapted according to land soil and elevation, promote domestic and overseas consumption, and rationalise the production and export structure.

18 The fall in monetary value being less than the price decline could imply imports of higher value coffees.
19 Figures mentioned since May 2001 are 780,000 tonnes and recently in August 2001 as high as 960,000 tonnes.
20 To put this in perspective, earlier mention was of African average yields of about 250-300 kg/hectare compared to Latin American and Asian averages of 500-600 kg/hectare. Exceptions are commercial irrigated farms in Zimbabwe producing 2.5-3.0 tonnes of washed Arabica per hectare.
Quality improvement efforts will continue with completion of the setting of international standards started in 1983 to 1987. Harvest and post-harvest techniques of drying, processing and storing have to be regulated. Further research is required on farming techniques, mould prevention, and especially on Ochratoxin A. Some work will begin on organic, gourmet and specialty coffee.

Another aim is to reduce cost per kilogram of green bean by replacing current varieties with more suitable growing strength, higher resistance to pests and diseases, and better yield per hectare. The other aspect will be more optimal use of fertiliser and water to reduce costs for economic productivity.

Adjustment of production to meet market demands will replace the unplanned expansion in the last 5 years, which was also contrary to government guidelines. Planting of Arabica in suitable areas, sometimes replacing Robusta, will result in 300,000 to 400,000 hectares of Robusta and about 100,000 hectares of Arabica with a total production of 600,000 tonnes, 75 percent Robusta and 25 percent Arabica.

The aim is to increase coffee consumption from 0.3 kg/person/annum with a population of 70 million people, to 1 kg/person/annum with 100,000 million people consuming 100,000 tonnes.

The Vietnamese coffee industry also needs to regulate the quick expansion by identifying good management roles for institutions such as the Board and the Association. There are plans to introduce a futures market in Ho Chi Minh City. Vietnam looks forward to global support and cooperation in research assessment, production and marketing.

Mr. Tatsushi Ueshima, Representative Director, Chairman and President, Ueshima Coffee Company Limited (UCC), gave an “Overview of the Coffee Market in Japan”.

Consumption has doubled from 3.3 million bags in 1980 to its highest of 6.93 million bags or 416,000 tonnes in the year 2000, making Japan the third largest consumer after the USA and Germany. Per capita consumption is 3.01 kilogrammes per person, ranking 17th amongst importing nations. The ICO Promotion Fund helped push consumption in the 1980s. This work was taken over within Japan using scientific research by COSIC and the NCA to enlighten consumers. However, the biggest factor was the Japanese industry’s efforts to manufacture innovative high quality products meeting consumer demands.

The All Japan Coffee Fair Trade Council issued Fair Competition Rules, Regulations and Guidelines concerning labelling of regular and instant coffee, which assists consumers in proper identification of products and ensures fair competition. Regular coffee bearing a country name requires at least 30 percent of that origin in the blend, and this rises to 50 percent in the case of canned coffee.

Trends show a decline in consumption at conventional coffee shops, but this is compensated by consumption at new types of coffee bars and by workplace institutional drinking. Consumption at home has continued to increase in the soluble form, and some roast and ground coffee with the spread of home machines. The liquid canned and PET bottle ready-to-drink coffee is the distinct Japanese innovation, which has continued to expand and dominates 33 percent of Japanese consumption.

Although green tea is still the top beverage, coffee consumption has increased from 7.4 cups per week per person in 1980 to 11.04 in 2000. The per capita consumption does not appear to have reached saturation and can increase by 25 to 30 percent to 4 kilogrammes per person per annum. The Japanese coffee industry continues in its efforts to promote consumption of good qualities, for instance by creating greater awareness of different producing country cultures through the Japanese Coffee Culture Society.
Conference Reception and Banquet

At the Conference Reception and Banquet, hosted by the International Coffee Organization, “the Economic and Social Development of Coffee Producing Countries” was presented by two guest speakers.

His Excellency Gnassingbe Eyadema, Chairman of the OAU, President of Togo, had his speech read by Togo’s Prime Minister, His Excellency Agbeyome Messan Kodjo. Coffee has contributed to the well being of rural farmers and the improvement of their living standards. However, the consequences of liberalisation have left them to the mercies of poor prices, little or no support from stabilisation funds, and foreign traders. With prices now at a level below the cost of production, the producers are victims to all the prevailing circumstances responsible for the dwindling African production of coffee. In conjunction with the producer organisations, buyers and governments, the IMF and the World Bank need to urgently mobilise a price stabilisation fund for the rural communities not to suffer from volatility in their incomes. In this drastic position, Africa is unable to recommend suspension of the World Bank’s financial support for the rehabilitation of the coffee sector, as per the Quebec Declaration.

The rift in wealth from the slavery days, and later colonialism, has continued to widen with unequal exchange in today’s wave of globalisation. While 20 percent of the world controls 80 percent of the wealth, about half the 800 million Africans live below the poverty line with Aids, famine, poor schooling and rising crime. US$25 billion is spent on cosmetics and pet products while Africa is denied cheaper generic drugs to combat Aids.

Africa needs the assistance of technology to use the human resources and harness the immense natural wealth of fertile land and minerals to develop by adding value. Africa needs unconditional annulment of debt repayments, which have already been paid off in constant terms, were it not for devaluing currency rates. Without sound structural changes with meaningful budgets, the programmes only add to poverty, which robs mankind of dignity. Democracy and human rights should guarantee freedom and allow creativity for development. These values should not be used as weapons of blackmail for the expression of international solidarity. Instead the values should be allowed to flourish in all their diversity, engendering new dynamics of sharing benefits with Africans. The U.N. considers poverty to be a violation of human rights.

Statement by Mr. Marcus Vinicius Pratini de Moraes, Minister of Agriculture and Food Supply of Brazil, in lieu of His Excellency Vice President Marco Maciel.

The Brazilian government and the global coffee industry hope that the Conference achieves the aims of examining strategies for improving the situation for producing countries and providing market stability for consuming countries as well.

The 19th century Brazilian economy was based on gold prospecting and sugar plantations. Coffee growing later led to political and economical progress with diversified industrialisation. It also attracted foreign direct investment with construction of railways, ports and power plants.

After the 1970s, other industries grew from coffee funding and played a greater role in the Brazilian economy. Coffee became less than 50 percent of the exports and is now around 5 percent. However, the coffee industry still plays a major role in the economy, employing more than 3 million people. Coffee has never lost its importance for Brazil, leading the way for the ICO formation, adopting UNCTAD’s integrated commodity programme and paving the formation of the ACPC. Brazil explores all political and economic efforts to increase exports and high quality products. Moreover, development of sectoral policies designed to foster domestic consumption have doubled the off-take in the last 15 years to 13 million bags, without any promotion assistance from outside.
There is great concern about the present scenario of high production with supply exceeding demand, high stocks in importing consumer countries, and low prices. Better commitment to the ACPC retention by all producers would help. No shelf price reductions, despite low export prices, can only mean that the intermediaries are making more profit. The main path to follow must be to increase consumption in traditional markets and creatively promote coffee drinking to non-traditional areas.

Coffee is still the bread earner for millions of people worldwide, so we can only anticipate that the private sectors and governments of importing countries will join the producers in their mutual responsibility for the social needs of the farmers in the current crisis. H.E. the Minister then praised Jorge Cárdenas and the organisers of the Conference for conceiving the idea and dedicating themselves to inspire the revival of the international coffee industry.

Saturday, 19 May 2001

Session Four INSTITUTIONS AND DEVELOPMENT

Chaired by Mr. Marcus Vinicius Pratini de Moraes, Minister of Agriculture, Brazil

Professor Robert Bates, Eaton Professor of the Science of Government, Harvard University, spoke about “Institutions and Development”.

Coffee influences the lives of all the people in the chain from producers to office consumers and workers, just like many other primary products. Coffee is also intensely political. An aspect of influence not much considered is the extent to which coffee has influenced scholarship and the degree to which the intellectual thinking of strategy-making leaders of social, economic and political systems is shaped by the world of coffee.

Evolutions of and from Coffee

Many studies have explored the rise of nations (Brazil), growth of regions (São Paulo and Central Colombia) and others have documented particular villages or cooperatives (Bugisu of Eastern Uganda). Some accounts are personal and written out of interest. However, they show considerable insight into the spread of coffee varieties, types of farms and processing, and the methods of exchange of inputs and coffee marketing, to and from the rural areas. The records also show how the seasonal credits evolved in capital markets and also the push of investment from the agricultural to the industrial.

The large scale farming system creates classes and a different distribution of income between capital and labour. This also results in different patterns of consumer demand and political ethos. Small-scale farming requires interaction and aggregation of the peasant society, with a more democratic force. The dominance of either a small or large scale farming system leads to emergence of different industrial structures. The impact of the style of production accounts for differences in class structure, economic organisation and political thought.

These micro facets have also produced the macro aspect of dependency. Many dependency theorists saw industrial development as progress and growth. The strategists counted on coffee and

---

21 Brazil has since abandoned the retention scheme later in the year 2001. The ACPC may dissolve in 2002.
22 This could be partly attributed to reluctance to change by the leadership and the communities.
other agricultural production to provide the movement of capital and labour for the initial industrial and urban development. Such purpose also justified the existence of large institutions, for example the Instituto Brasileiro do Café to develop international trade.

**Global Governance**

Coffee defies the theories that there is no international structure of ‘government’ and also that every nation can choose a path in its individual interest, even when dealing with matters of international concern. The ICO has shown the ability to regulate international markets by influencing price stabilisation through monitoring limitation of supply. By enforcing limits to exports, the ICO influenced and altered the behaviour of producer States. The ICO also altered the economic goals of consumer countries. They enforced quotas to check imports and stabilise prices for overall benefit, rather than allowing them to fall for the national good. In the USA, Congress approval required a combined force of the Department of State foreign policy and the economic elite of large coffee roasters to forge an alliance, even at the expense of the consumer.

The ICO is not a result of Brazil and other powerful producers trying to achieve favourable terms of trade, as some people believe. Brazil has often failed to limit exports and raise international prices, or when it did, then others in Africa, Asia and Latin America failed to comply through lack of finance. Implementing an international political agreement requires resolution of conflicts of policies and impediments at the national level. This creates ‘insonence’, the transfer of costs and benefits. For instance, taxing exports transfers resources from the producers to the State, whereas stockpiling to limit exports does the opposite. Licensing production, as was done in Kenya, can limit supply at the cost of the rural and benefit the urban communities.

A successful approach to reformulating an international agreement requires a deeper understanding and resolution of sub-national interests, and for the impetus to come from domestic powers of each State to push forward their interests in the global arena, rather than maximisation of collective interests of the different nations.

Modern economics now favours institutionalism, only after studying the reasons of market failures. Methods of collection and dissemination of information and their transaction costs, study of defining property rights and the related legal systems, are examples of why economists turned pro-institutional. Traditionally economists have disfavoured government agency intervention in agricultural markets, from as early as the Corn Laws. In coffee, the marketing boards were unpopular with economists because they distracted the positive and negative incentives to farmers by segregating the behaviour pattern of national and international prices. However, through study of market failures, economists conclude that such institutions (marketing boards) cogently bind the local with the national infrastructure and have immense value for community welfare. Examples of a regulatory role for institutions are a) control of effluents in polluting rivers downstream from pulping; b) the State’s role in policy endorsing the integrity of brands, allowing rational private investment into quality marketing; c) research into technology for growing varieties, methods, and marketing systems. Since not all aspects of government agency intervention can be detrimental, the emphases of responsibilities for parastatal institutions have changed from commercial aspects of marketing to more regulatory roles.

The new thinking on institutionalism must also selectively discriminate. Powers that can be constructive about property rights can also be destructive in implementation of those rights. Analysts should also deploy systems to direct power for the interests of the industry rather than a few people, concerned with the institution, who might covet its assets.
Coffee has nurtured the intellectual lives of many scholars, leaders, economists and politicians in shaping the social welfare, industrial and urban development of many countries.

The relevance of the role of institutions in development is detailed in the two topics discussed by the next speaker, Professor Rosemary Thorp of Oxford University, “Has the Coffee Federation (of Colombia) become redundant? Collective Action and the Market in Colombian Development”.

Prof. Bates talked about the economists’ thinking of a need for institutional influence and intervention but in a changed manner for regulatory aspects of research and social welfare. Prof. Rosemary Thorp addresses the recent criticism of the previously much acclaimed National Coffee Growers Federation of Colombia (FNC). She evaluates its historical role and finds a rationale for the FNC in dealing with farmers’ collective action problems and providing continuity in an evolving culture. Even under the new market paradigm, the FNC still adds value in terms of efficiency and equity through all the experience built over the years.

Since the FNC is considered the brainchild of politicians rather than small producers, according to one line of thinking the Coffee Federation of Colombia should not exist or have survived. There is a tendency for problems to arise and break up rural associations consisting of a large number of small producers in a region. However, cooperations created through producers’ consensus are more successful for longer periods. This paper analyses the initial political input and the subsequent decline and rejuvenation of the FNC during the Second World War. Prof. Thorp then considers the current status of the FNC with coffee’s declining importance in the Colombian economy and in today’s free trade world.

The production structure has no economies of scale in collectively growing a large quantity of good quality washed Arabica on small farms at high altitude and steep terrain with little machinery. Other inter-planted subsistence crops also shade the coffee. Farm size is usually less than one hectare, whereas more than a hectare is required to produce a cash income above the poverty line. Large estates existed in Cundinamarca and Tolima but between 1920-1960 they have been sub-divided. Family labour hand picks and processes the fine quality coffee with a hand driven pulper. Control of Broca (Coffee Berry Borer) requires that all ripe fruit, including those on the ground is completely removed, to stop the spread of the insect. This requires more family labour. Water can be a limiting factor. Recycling of water, used purely for carrying the fruit, and innovative introduction of efficient pulping technology have reduced water requirement by 4,000 percent. The processed coffee is sun dried. This produces better quality and is more economic considering the limitations of electricity supply. However, the post-farm hulling, warehousing and marketing, all require economies of scale a) to market the coffee bearing the ‘brand’ (area of production), b) for quality control and assurance, and publicity. Collective action issues emerge once aggregation begins, since quality is sensitive to the area of production and the treatment at all stages of operations, starting from the coffee bush. The standards of control and monitoring are dependent on public amenities such as roads, health and education.

As Prof. Bates pointed out, the large numbers of small-scale producers result in a rural peasant style social, economic and political scenario. However, a few wealthy coffee families have emerged from small farms, progressing to trade coffee or further into the industry as exporters or manufacturers. Prof. Thorp argues this as a sound reason for the continued success of the FNC even though politicians rather than producers are supposed to have created the institution. Basically, the progressive farmers and politicians have intermingling identity and no clash of interest. Some of the producers with organisational capacity and resources have simply moved into industry or politics or other better opportunities.
Until June 1927, many early efforts from the beginning of the 20th century had failed to organise the Colombian coffee industry. The FNC was created with a push from the traders and producers to ensure that public institutions a) developed the sub-sector and b) applied legal and regulatory measures; c) reduced operational costs, for instance with d) improved transport conditions; and e) directed publicity, domestic and foreign23. Professor Thorp reasons that the introduction of a tax in its second year, to fund the Federation’s operations for the first 10 years, provided purpose and continuity. Otherwise the efforts could have disintegrated once again. It was also quite a feat to establish a structure and a tax at a time of financial depression. The philosophy of that period acknowledged such a situation as a norm. It was quite acceptable that the Federation conducted the monitoring, quality control, and marketing operations, which would otherwise have been performed by the State. The conflict is perceived later when the FNC entered marketing as a player, while regulating it.

Although in the initial years only 6 to 10 percent of the coffee moved through the Federation’s warehouses, the early achievements were to look after the interests of the small producers, separately from the political strife with continued high level of violence. This still applies today. In addition, the government consented to regulations that established the branding of separate marks of origin by region24. A presidential decree allowed creation of a network of enforcement inspectors, giving the Federation power as well as a sound system for tax collection.

The Federation established trust and credibility with the government and the producers. The technical authority and integrity allowed some of the elite farmers and executive members of the Federation to step into policy making at the national level on coffee as well as other matters. They were better placed than changing governments to deal with international matters. Their ethics also allowed coffee matters to be relatively free from corruption. Prof. Thorp talked about the swings in the politics and balance of power with the government, a) during negotiations and pacts with Brazil allocating export quotas, and b) during the renegotiations of the Federation’s contract with increased government representation. Overall, the Federation realised that although it stood against quotas and increased government participation, it was in the best long-term interest of the producers to strike a balance, to maintain power, and to remain assertive above party politics. Successful negotiations allowed the increased coffee tax and also improved the Fund.

The Second World War excluded trade to the European market, and Latin American producers shared the US market by allocating quotas under the Agreement signed in Washington DC in November 1940. The Colombian government created the Fondo Nacional del Café, managed by the Federation to buy and sell coffee stocks. The culture of quotas became essentially accepted. The Fund continued its coffee activities after the war, giving the Federation opportunities to diversify into other income generating activities. Coffee growing required little direct re-investment and surpluses were reallocated in other directions. The Federation was also made responsible for a) credit operations for wider coffee market operations, b) being a residual buyer at minimum prices, c) marketing of inputs, and d) increased technical services.

While coffee’s contribution to the GDP and agricultural production declined, the Federation’s inclusion in the Council of Ministers (Consejo de Política Económica y Social – CONPES) and the Central Bank (Banco de la República) continued its importance in policy making. Influencing the management of exchange rates, during coffee price fluctuations, helped avoid the typical Dutch Disease, experienced by other primary commodity producers. The Federation’s influencing policy helped Colombia achieve relative stability.

23 The last measure, coupled with quality, is probably one of THE main reasons for the growth and popularity of the country’s coffee. It can also be the reason for the improved quality – in trying to publicise and market, the feedback exchange gave rise to the realisation for quality production and the market needs.

24 Branding gave assurance to buyers and created producer competition, contributing to quality improvement, maintained through a localised pyramid network and by extension workers.
To be a major national and international player and continue the macroeconomic influence, the Federation also needed support at the micro level. It invested in developing a support structure and a culture of loyalty, which also helped achieve political support and continued administration of coffee taxes. The Federation appears wise not to have chosen the course of enticing membership by paying higher prices, which would have stimulated production and undermined the international quota system.  

To build support and loyalty, the Federation gave its members identity through a membership card, the *Cedula Cafetera*, and benefits in terms of technical services and credits. Arturo Gomez, the General Manager from 1957, started elections of local committees at the municipal level and about 55 percent of the funds were spent on community services and public works, combating malaria and building roads. This developed a sense of ownership – as subscribers to the Fund – and as the beneficiaries, they had ability to contribute to decisions. Remuneration for coffee to be below free market price was acceptable. There was a spirit of self-help. Violence and guerilla penetration were also contained, something the government valued very much. The government also spent less on health. Most importantly, the Federation placed Colombia prominently on the map in international markets and negotiations.

The culture of loyalty was entrenched enough (almost 70 percent of growers at the highest) to prevent excessive free-riding by private exporters – to buy at better prices during good times and make use of the branding and publicity at all times. Critical management of the internal price was important, to be fair and yet leave a sufficient buffer for income for the Federation, in addition to the coffee tax. The only aspect that may be considered unsuccessful was the diversification programme, particularly into citrus. The main reason was the Federation’s lack of capacity for dealing with and marketing non-coffee products.

In the post 1989 ICA economic clauses period, with lower prices, the Federation has continued only at the expense of the Fund’s assets. Although local municipalities are now independently elected, the local Federation encourages members to use their collective power for lobbying and continues monitoring their efforts. This is still effective because of the legitimacy and historical power inculcated within the peasant producers. The same cooperative spirit combats broca (berry borer) and spreads implementation of new production techniques (*café tecnificado*).

Many agree today with the World Bank and private exporters that the Fund should be abolished and the Federation’s roles reduced. They say that the producers will continue to cooperate because it is in their interest. Prof. Thorp counter argues that, without the Federation, there would not have been an ICA, or consistent international marketing of such a large quantity of good quality coffee over a long time span. There would be less local infrastructure (the human cooperation as well as roads, schools and hospitals) and the solidarity that helps to reduce the guerilla violence. In conclusion, without the successful formation and operation of the Federation, there may have been a smaller cooperative organisation with less importance to and for the national and international coffee industry.

Ambassador Sergio Amaral, Chairman of the *Association of Coffee Producing Countries*, made a brief speech.

Just as José Maria Da Silva Paranhos (Consul in Liverpool and later Baron of Rio Branco) in 1892 emphasised the need for improving quality rather than increasing quantity to achieve higher

---

25 *It would also have reduced the Fund’s resources for the intervention price.*  
26 *This paragraph shows the resolution at sub-national levels, and the national policy strategy made and presented, ALL by the one and the same institute (in this instance), to the international scenario, acting for the common good of the nation as well as in concert for the global coffee industry.*
revenues, Mr. Amaral repeats that advice today for all producing countries, to add value and promote consumption. Rather than delve into the diagnoses, as others have already, Mr. Amaral pointed out that the current crisis is different from previous cyclical ones. There is no longer comparative advantage in size of land or low priced labour. It is more in the knowledge content of the product, education, labour skills, combined with technology, information, value added processing, branding and efficient distribution. Secondly, although there is support for liberalisation, there is also concern about its course. Changing ICA terms, concentrated trade and industry, large funds operating the futures markets, have all altered the supply management systems. Producers receive less of what the consumers spend, but the trade and industry capture more.

Coffee, cocoa, tea, sugar and banana prices have all gone down by about 50 percent or more. The remedy to low prices has been to burn coffee in the past, and recently to retain coffee at origin to reduce stocks in consuming countries. This seems to have correlation with price. Retention has been successful as a temporary measure to prevent prices falling precipitously. However, not all countries participated, and the retention of 7 to 10 million bags was eventually overwhelmed with the flood of oversupply, especially the 13 to 14 million bags from Vietnam. This time around, leaving low prices to adjust the market higher will be insufficient in the medium term. There has to be a concerted effort to reduce supply and achieve long-term sustainable prices for action against poverty. Many of the 50 LDCs derive more than 70 percent of their income from coffee.

Debt forgiveness will help. The initiative to promote consumption is commended, and improving quality is complementary. In addition Central American countries have proposed the elimination of some lower grade qualities, and it is hoped that the World Bank would support the effort. Fair Trade is an encouraging concept and trend but seems to have limited market potential. Diversification is also an essential strategy but may only lead to other substitute commodities, or encounter developed country protectionism as in orange juice, vegetable oil, sugar, and meat. Adding value to green coffee is an alternative to follow. The USA re-export 10 percent and the EU about 30 percent of the imported beans as roasted and soluble products. Producing origins can start taking over some of this share but there are tariffs in the importing countries.

The World Bank and the IMF advocate against import substitution but this advice should be consistent and followed everywhere. These bodies have also dismantled producing countries’ marketing boards and need to quickly address diversification, risk management and value aggregation rather than promote expansion of coffee. Ultimately the solution is with producing countries in controlling supply, and the ACPC hopes that private trade will react positively to the invitation to promote consumption, good quality and other common interest policies. The governments and the World Bank will also be approached to participate. Globalisation can work to benefit more with a cooperative effort from all concerned to balance opportunities and create solidarity.

Panel Discussion on the Role of Institutions and Development

Professor Christopher Gilbert, Research Professor of Finance, Free University of Amsterdam, started this discussion.

The Federation fulfilled the roles of producer associations as well as marketing boards, connecting the policies to the producers and vice versa. This is difficult to replicate. However, Prof. Gilbert also made the main point that both Prof. Bates and Prof. Thorp mainly looked historically rather than forwards.

The Colombian government taxed and the Federation spent a part of the money. Now that coffee has become a poor crop with less revenue, does the Federation still have a role, or might the private sector better serve the needs of the farmers? The ICA economic clauses supported prices and continuity of these clauses would have meant higher prices in the 1990s and now. The Federation will also have a purpose for international controls.
International commodity agreements are internationally sanctioned cartels, especially for coffee, sugar and tin, and not so much for cocoa and rubber. Producers restrict supplies with the consent of consumer governments under international law. Over time, the benefits of stable and relatively high prices are eroded by inefficiency and rent-seeking. Agreements with only producer participation are not always effective. Only consumers can check free-riding producer non-members, who enjoy the benefits of higher prices without reducing their level of exports.

A consumer member, for example the USA, may join an agreement to trade economic costs for political benefits. This would make it a fully effective agreement compared to a partially effective one-sided cartel of producers. However, consumer members can impose a lower price bracket and prevent free riding. This way, they can benefit while the complying producers gain and free riders lose. Prof. Gilbert suggests that coffee conforms to this model, with control by consumers (ICO Certificates of Origin) and with the producers’ determination to control supply. Brazil and Colombia coordinated retention in the 1950s, resulting in the first Agreement. Then a fund in the mid-1970s supported prices when price-trigger negotiations with consumers failed. This led eventually to the third Agreement.

Controls broke down when a) the producer cartel threat was less credible; b) farmers no longer benefited because of rent-seeking; c) expansion in Brazilian consumption caused doubt about the need for controls; d) production expanded in new countries; e) different needs of Arabica and Robusta producers caused tensions.

Export controls and import restrictions can regulate excess production and consumer stocks, but they cannot control depreciating exchange rates or advances in efficient productivity. All four are causes of low prices. No scheme works without enforcement. This includes retention, which is also expensive to finance. Stocks can be released with onset of higher prices, and the knowledge of stocks will dampen market sentiment.

Coffee diversion to alternative uses has more effective potential. It would appeal to consumers and producers, and would raise quality standards. There would be less unutilised stocks to discourage the market, unless production consistently exceeds consumption plus diversion. Other complementary solutions are to uproot coffee for alternative crops, or to replant earlier with better quality cultivars. All these schemes would require incentives. Producer controls and consumer cooperation in regulating supply is the long term answer.

As a continuation of the Panel Discussion, Mr. Diego Pizano, International and Economic Adviser, National Coffee Growers Federation of Colombia (FNC), spoke on “Coffee Institutions and Economic Development in Producing Countries”.

The Hungarian mathematician Paul Erdos ‘thought’ that the human mind was meant to convert coffee into theorems, and Bach was inspired to compose the Coffee Cantata as were the speakers at this Conference – inspired by coffee.

Reducing poverty must be the foremost priority for Asia, Africa and Latin America. Coffee institutions have been instrumental in determining a dynamic process of sustained economic growth for development and therefore reduction in poverty. Analysts have attributed many factors such as technical progress and productivity contributions from labour, energy, natural resources, savings or investment, or even social infrastructures, as reasons for some countries to have high annual growth rates.

Consumer member discontent about discounted sales to non-member consumers was an additional significant reason for the breakdown of the ICA.
However, Prof. Douglass North, Nobel Prize winner for economics, has consistently argued that it is the manner in which all these factors are managed that makes all the difference. Policies and rules of institutions that govern the time and resource allocations correctly have the sustained success. It is the legal and regulatory environment that a) sets the ethical standards for interaction and behaviour of individuals and societies, b) determines the efficiency of resource use and productivity in political, economic and social terms, and c) generates the spirit of cooperation, competition and goodwill in systems such as property rights.

Knowledgeable and adaptable institutions with low transaction costs are stable and effective. For instance, inefficient allocation of productive resources caused the Soviet Union to collapse. Whereas Mr. Deng in China initiated institutional change that accelerated growth and pulled millions out of poverty. The rules and how they are applied determine the positive and negative incentives.

Society may promote pirates instead of sailors, or civil servants instead of businessmen. Institutional incentives can promote farmers to become exporters, industrialists and national leaders. In coffee the influential international institutions have been the ICO/ICA, the futures markets, Stabex system, the EC (European Commission) and the ACPC. In addition, each country’s social and legal systems and coffee policies form the national parameters of interactions. Trade organisations and new phenomena such as specialty coffee guide the behaviour of consuming countries with their government policies.

Prof. Bates considered that consumer participation in the ICA was economic give for political gain, for instance President Kennedy’s support for the 1962 Agreement to deter communism in Latin America. Mr. Pizano agrees with Prof. Gilbert that an appropriately negotiated Agreement can also be for purely economic benefit, without any political influence, for both consumers as well as producers. However, the ICO role and position of international coffee governance can influence many areas even without economic clauses in the Agreement:

1) Reliable unbiased statistical information for policy making,
2) Platform for producer and consumer interaction on development prospects,
3) Setting policies on creating international funds, for instance regulating and monitoring a tariff on coffee imports, as Prof. Stiglitz suggested, into consuming countries for:
   - Promoting projects in producing and new consuming countries to stabilise prices, socio-economic development in coffee growing areas,
   - Promoting coffee consumption and quality improvement, including health research,
   - Supporting sustainable coffee development, and
   - Creating an international coffee research centre as conducted for rice and maize.

These areas are all supplementary functions for the ICO with coordination from the private sectors in exporting and importing countries.

The institutional network of the ACPC members can continue to play a symbiotic organisational role in price stability through supply control and quality improvement. Diversion of low grades into other value added products, as well as adding value to the coffee produced, are further suggestions from Prof. Bates and Prof. Gilbert. To increase productivity, support for scientific research and technical efficiency also require institutional discipline and compliance.

---

28 Another Nobel Prize winner, Amartya Sen, has also won acclaim saying that each individual in society is an agent of action for implementation of development. Humanism allows an individual and communities the human rights and dignity, gives the individual and society better power to perform. The same applies for institutions composed of those individuals.
The impact of the Stabex system may be small. The futures markets, as properly used hedge instruments, have allowed many international traders and roasters to manage their price risk. The knowledge and expertise for using such tools should be made available to developing countries to reach their farmers. There are no firm academic conclusions on the benefits or disadvantages of the liquidity and heavy influence of investment funds in determining market prices.

At the national level in producing countries the coffee policy governing bodies are marketing boards, *caisses de stabilisation*, auction systems, and public and private sector partnerships in trade associations and federations. Detachment of growers from the decision-making processes results in less orderly development of the coffee sector and the country’s macro-economic policy management. Excessive State control results in higher intervening taxation in the value chains and resources may be expended into other sectors. Insufficient savings in boom periods, for longer-term investments, can cause ‘Dutch Disease’.

The Colombian Federation was established in 1927 as non-profit and to safeguard producer incomes. As already discussed by Prof. Thorp, it has developed the production, the exporting and marketing aspects, and simultaneously reconciled coffee policies a) between growers and the government and b) for national and international macro-economic considerations. The Federation has coordinated research and conducted farm extension of production techniques. Funds have built the rural infrastructures, physical and social. The funding has been mainly from a grower tax and later with Treasury funds to manage strategic stocks for quotas and retention. The Federation has significantly influenced the farmers’ livelihoods by being adaptable to their needs and dynamic to face changing circumstances, always re-structuring to do better. Lessons for others are to have collective action through producer groups, strength in (compulsory) membership but with distinct tangible benefits. Clear-cut rules on property rights promote access to credit. Political influence should be minimal.

Concluding and summarising the above points, Mr. Pizano added that private sector participation should be prominent in today’s liberalised marketing structure, to augment the institutional framework for development and poverty reduction. Moreover, as Prof. Stiglitz indicated, producing countries should mould into the rules of the international economy in ways that minimise risks and adversities, and maximise the benefits. Globalisation should not mean a diminished State role, but an enhanced investment policy for regional productivity and harmony with the international scenario. Non-governmental organisations (NGOs) and the private sector can also contribute to effective development of legal and regulatory systems, education and health aspects.

---

**Conference Luncheon**

At the Conference Luncheon, 19 May 2001, Mr. Orin Smith, President and Chief Executive Officer (CEO) of Starbucks Coffee, talked about “The Specialty Coffee Revolution”.

This talk was presented with a series of slides. A bar chart showed the growth assessment at Starbucks’ initial base in Washington State, from 61 company-operated stores in 1992 to 215 units in the year 2000. Internationally, from a start of 2 stores in 1996 (excluding 9 SCC locations in London acquired in 1998), there are 525 in 2000. With a projection of a few hundred more in 2001, Starbucks expect to end 2001 with over 900 international locations. Some time in the future, the eventual aim is to run 10,000 stores, with half of them in North America (USA and Canada), and the rest in Asia, Pacific, Europe, the Middle East and Africa.

**The Experience + Image > Loyalty = Re-energised Consumption of Innovative Brands**

---

29 In view of many allegations of ‘funds’ distorting market prices this can be the subject of a study, if any benefits are perceived from the resulting outcome.
The slide show then had a couple of interesting pictures of bustling new stores in Japan, with young people at the “The Third Place” where Starbucks deliver *The Starbucks Experience*. Starbucks created the ‘Specialty Coffee Revolution’, an industry which did not exist, and thereby re-energised coffee consumption. The revolution has educated millions of consumers to appreciate quality coffee, for which they are willing to pay a premium. This has enriched and enhanced the coffee culture in many countries.

It is the experience that matters. This starts with the beans from the coffee origin countries to the roasting plant in Kent, Washington, and to the consumers, one cup at a time. In addition to serving the highest quality coffee, Starbucks is committed to making a difference in the lives of the communities where it does business. The now legendary brand takes its values and cultures to Kuwait and London, Rockville in Maryland to Harlem in New York. This respect for the origin countries, the customers and the partners (including employees) creates trust and respect for the brand.

The ownership of shops brought real estate to the portfolio and innovation brought new discoveries in ‘Frappuccino’, cool ready to drink bottled coffee with milk added in chocolate or orange mocha taste. Innovation brought a new brand of coffee ice cream to the US. In extending all partnerships, social responsibility is of the essence.

**Session Five**

**SCIENTIFIC AND TECHNOLOGICAL ASPECTS**

Chaired by Dr. Andrea Illy, [*President of the International Scientific Coffee Association (ASIC)*]

♦ Professor Darcy Lima, Federal University of Rio de Janeiro, Brazil, has been a medical doctor and has conducted work in London (UK) and Vanderbilt (Nashville, Tennesse) Universities, “*Coffee and Health Project*”.

Mankind has been aware of the effect of plant material and their extracts ever since cultivation of food began, if not before. Selection and development of psycho-tropic plants has been simultaneous. Coffee, grapevines (for alcohol) and tobacco are the legal ones and cocaine, opium and cannabis the illegal ones. The plantation, trade, traffic and consumption of illegal drugs such as heroine and marijuana command a global volume of about US$500 billion, of which the USA share is one fifth at US$100 billion, twice as much as the country’s spending on petroleum.

The neuro-chemical cycle of stimulation, depression, signals of increased need and dependency have only recently been fully understood. Drugs simulate neurotransmitters that activate the brain reward circuit, resulting in relief of stress or anxiety and creating pleasure.

Depression is prevalent in 20 percent of adults in the USA, and more than 15 percent of the depressed commit suicide, the second highest cause of death in 15-19 years old white males. Losses in work productivity and medical treatment through depression are estimated at US$ 43.7 million per year. Alcohol based crimes, accidents and health problems create a loss of about US$160 billion. Whereas epidemiological studies show an inverse relationship between daily coffee intake and depression, or suicide, or cirrhosis. Among all the stimulants, coffee has also been proclaimed by many religious leaders in ancient times, including Mohammed in the 6th century and Pope Clement in the 16th century.

Caffeine is the most prominent and studied but not necessarily the most stimulating or the most beneficial of ingredients in coffee. Considered safe up to about 500mg daily, caffeine is more prevalent in higher degrees of roasts. At lower degrees of roasts, amino and chlorogenic acids (CGA)
play great influence against opioids, which trigger depression and such negative symptoms. Consumed in moderate quantities, coffee has also been shown to reduce heart diseases and pancreatic gallstone formation. The second most fatal malignancy, colon and rectal cancer, is reduced by coffee.

Professor Peter Martin, Vanderbilt University, USA, also a medical doctor, and a director of the Institute of Coffee Studies (ICS), “Coffee and Health”, said that the ICS was set up to study the pharmacological actions of coffee compounds and identify therapeutic health benefits. The results would be disseminated to exchange the knowledge with partner nations. Since there is no compelling evidence that moderate consumption is detrimental to health, the ICS rationale is to highlight health benefits rather than disprove adverse effects. There is no censorship of the ICS in-house scientists’ publications in open journals, only regular review by leading scientists and unrestricted grants.

Medical schools still teach potential physicians that coffee is detrimental. However, clinical scientists are more interested in the health benefits. The process of roasting from green beans reduces the CGA but creates quinides. Entire coffee extracts and individual ingredients were studies in parallel, in vitro and also on animal models, healthy and diseased humans and in population studies to find neuro-receptor binding properties. As already mentioned, there resulted anti-depressant effects by restraining the opioid systems. In addition, similar restraint on adenosine leads to a calming influence by decreasing heart and brain tissue excitement by inhibiting excessive neurotransmitters. Antioxidant, neuro protective and endothelial (a sheath covering) protective effects were also found. By decreasing free radical toxic or highly reactive oxygen forms, CGAs have antioxidant effects which minimise damage to DNA, lipids, proteins and tissues. Endothelial protection reduces tissue and organ dysfunction and the chances of hypertension, diabetes, congestive heart failure, unstable angina.

The Positive Image

These academic studies may help understand coffee constituents and their potential to prevent and treat common diseases, such as depression/anxiety, cardiovascular arteriosclerosis, brain degeneration (Parkinson’s and Alzheimer’s). The future plans are to 1) pursue research through pilot and feasibility studies, 2) coffee heart study (ICS in conjunction with WHF). Other important implications are to maximise coffee constituency through genetics, and more precise roasting and blending. Going deeper, one could develop ‘medicinal’ coffees with purpose – for mood, memory, antioxidant content.

Dr. Daniel G. Steffen, of Kraft Foods North America, Glenview, Illinois, USA, and also Chairman, Scientific Committee, NCA, talked “On Promoting the Good News About Coffee”.

Many energising and beneficial effects have been ascribed as virtues of coffee. It is only in the late 1960s that modern scientific (especially epidemiological) techniques have been used to study coffee and caffeine. Now, with improved methods, and interest from the industry, many previous allegations of ailments caused by coffee have been dispelled. There is no conclusive evidence linking coffee or caffeine, consumed in moderation, to any disorders, including cardiovascular disorders, hypertension, stroke, cancer, reproductive problems, osteoporosis, liver and kidney dysfunction.

Although such a large-scale population study is bound to have inherent variables, Dr. Darcy Lima’s experiment in Brazil is proving the hypothesis that promoting coffee amongst adolescents may reduce alcohol consumption. His observations also corroborate Dr. Peter Martin’s data that coffee prevents depressive moods by acting against opiates, and therefore could be related to reduced alcohol consumption. Dr. Martin’s classic bio-assay demonstrates antioxidant activity in coffee components.
Antioxidants

Investigations have shown many other positive coffee attributes. Various separate 10-year long studies at Harvard have found a) women consuming two or more cups of coffee per day were 65 percent less likely to commit suicide, agreeing with earlier findings of San Francisco’s Kaiser Foundation. b) Men drinking 2-3 cups of caffeinated coffee per day had 40 percent less risk of developing gallstones; and even less risk with four cups or more. c) Regular coffee drinkers of four cups or more per day had 25 percent less chance of colon or rectal cancer compared to non-coffee drinkers. d) 3-4 cups per day reduced the risk of Parkinson’s disease two to three fold. Other studies in Japan and the USA have shown that 3-4 cups per day reduce liver cirrhosis by 80 percent, compared to non-drinkers. Adults on 2-3 cups per day have 25 percent less asthma than those not drinking coffee. One should note that not all effects are due to caffeine. There are more than 2,000 compounds in the final beverage, many of which are created during the roasting process. Some of the beneficial compounds have been identified as per the previous speakers. The antioxidant capacity needs to be emphasised as valuable and credible due to the reduction in occurrence of colon cancer and cardiovascular symptoms.

However, great care needs to be taken on how to present and advertise this information to the public. Dr. Steffen detailed the principles and methods of corroborating and professionally substantiating the findings and results, for them to be consistent with other documented supporting evidence, before publication. The United States Federal Trade Commission rules are a good benchmark.

One should not discount the possibility that consumers may not easily be swayed by positive news about coffee, when they have so far participated in consuming it with a different image, and enduring the negative media. The right approach is vital to changing the image. Something akin to the International Food Information Council (in Washington D.C.) programme called ‘A New Conversation with Consumers’ would be useful. Communication about coffee containing antioxidants offers a recognised consumer interest in phytochemicals. The message needs to be simple, truthful and faithful to the scientific base. With discovery of positive news, there is no longer need for a defensive stance on promoting coffee from the health perspective.

Dr. Gabriel Cadena, Director of the National Coffee Research Centre, CENICAFFE, Colombia, spoke about “Sustainable Coffee”.

Coffee is grown in more than 50 tropical countries sharing some common cultivating practices and each country has slightly different technologies according to geographical position and altitude. All coffee producing countries have biodiversity. There is overall megadiversity in terms of the species, plants, animals, birds, etc. Colombia shares much of the ecosystem biodiversity of the other neighbouring countries in the Andes.

In terms of biodiversity, the order for countries having the most endemic superior plants are Brazil, Indonesia, Colombia, Mexico, Madagascar, China, Philippines and India. All countries with high biodiversity in animals – vertebrates, birds, amphibians, fishes, and even butterflies – are all coffee growing nations. All these countries need to practise sustainable methods in agriculture and coffee production. The U.N. definition of sustainability is to provide the current requirements without compromising or jeopardising the needs of the future. For this reason environmental protection of natural resources is vital.

---

30 Diversity of the cultures of people interacting with the natural environment — growing coffee and living in the producing countries — are equally important to the sustainability concept.
Soil conservation is one of the most important aspects of environmental protection, especially in the steep highlands of coffee growing areas. Rainwater run off is one of the most serious causes of soil erosion. The main methods of soil protection are terracing, inter-planting other non-competitive plants for soil cover, and mulching to reduce run off. Soil cover also improves soil infiltration of water and reduces soil impact and erosion by rainwater. These agronomic methods are the most cost effective.

Organic fertiliser, such as compost from coffee growing material, can be used as mulch in the field and nurseries. Shade trees also protect soils by their umbrella and leaf fall. A large variety of species are used as shade trees and many different coffee shade practices exist in producing countries. Shade trees are also an additional form of fuel and income for the coffee farmer.

The type of coffee variety plays an important role in sustainability. Arabica varieties of typica, caturra, and bourbon are all susceptible to leaf rust. The variety colombia does not require the use of fungicide against leaf rust and so reduces the cost of production and contamination by use of chemicals. The variety colombia (a hybrid of timor and caturra) is the fifth generation from a mixture of progenies and shows resistance to the fungus Hemileia vastatrix causing leaf rust. And yet according to international cupping panels the colombia variety manifests the same important mix of cup quality characteristics of coffee found in the desirable varieties of bourbon, caturra, typica, and the two parental varieties of ‘yellow’ and ‘red’ colombia.

Coffee berry borer (broca) is the most important coffee insect pest. Cultural control is by timely picking of all the ripe fruit. New integrated pest management systems have been introduced to combat the borer with its natural enemies without the use of chemical insecticides. This is better for people’s health and results in overall environmentally friendly and sustainable practices. For example such methods protect fish and other species living in water. In conjunction with CAB International of the UK, biological control methods using entomological, entomo-pathogenic (insect attacking), fungi such as Ovarium fasciana have been introduced. Also through CABI, parasitoids of African origin, 2 species of tiny wasps that only eat broca, have been introduced to control broca and protect the environment from chemicals.

Another very important issue for sustainability is water. Water is scarce in many parts of the world with serious shortages looming in others. According to the World Bank, water shortages can be the most serious obstacles for a stable, secure environment and for the fight against poverty. The problem can be acute since 70 percent of the fresh water is used in agriculture. The scarcity is recent. In the 1950s very few countries had any problems. Today, 29 countries and 400 million people suffer water shortages. By the year 2050, 66 countries and two-thirds of the world population will face scarcity. Water quality and the volume of useable water are both important. Today, 1.4 billion people live without clean drinking water and 2.3 billion people lack adequate sanitation because of low supply of water. About 7 million people die through diseases caused by water as half the world’s lakes and rivers are polluted or contaminated. Water and food shortages can create millions of refugees. Through new pulping and washing systems developed by BECOSUB (Beneficio Ecological Café), there is an amazing 95 percent reduction in water need and 92 percent reduction in the organic pollution of rivers from bio products. The systems also facilitate compost production for organic coffee and diversification in growing of edible fungi or mushrooms. The mucilage is also

---

31 Leaching and drying of open soils are major causes of soil degradation, also prevented by mulching or covering open soil with other compatible plant species.
32 Shade (and mulch from leaf fall) also increases the biodiversity of insects and other species in and on the soil, and is conducive to reduced pests and diseases in coffee trees.
33 Usually the indigenous shade trees are the most appropriate, often naturally shedding leaves during periods when less shade is required.
used for animal feed. The innovative coffee pulping systems can cater for 3,000kg/hr, 600kg and 300kg/hr, down to 100kg/hr mobile pulpers. These are ideal for small growers and reduce the pollution of river water. The ‘Hydrocyclone’ systems are based on recycling the water used for carrying the fruit and densimetric selection of fruit in gravity fruit-vats prior to pulping.

BECOLSUB have also developed overhead plastic awning covers for drying trays as a part of the sustainable post-harvest systems. The covers avoid rain falling on drying coffee. The overhead cover with open sides thus reduce labour requirement for turning or removing the drying coffee\textsuperscript{34}.

Lastly, Dr. Cadena proposed an initiative to create an international coffee research centre, which should be set up in collaboration with the World Bank, as well as producing and consuming countries, for the development of sustainable and clean technologies for producers and consumers.

Dr. Peter Baker, CAB International, UK, spoke on the “State of the Art Review on Coffee Technology, Genetics, Diseases, Organic Coffee and Sustainable Development”.

Smallholder coffee farmers’ livelihoods are threatened, and very few of them have the know-how and capability of utilising the limited possibilities of niche markets, and qualities to compete with the low cost commercialised farming techniques.

They need help to re-organise radically and change to survive in this free market situation. The industry needs to know their hopes, needs and limitations to provide the knowledge for sustainable continuity. A change has to occur, from the peasant lifestyle to modern entrepreneurial methods.

The traditional top down approach for development has to be changed. Normal extension methods of personal monitoring are too expensive, and one worker serving 1,000 farmers is ineffective. For the modern more knowledge intensive technology to be effective, greater farmer involvement will better enable the testing of the technology. Farmer participation in experiments, building schools, will also generate ideas from implementation.

The CABI in collaboration with the ICO and the CFC, and others, have been developing techniques using direct interaction with smallholder farmers. One example given was the berry borer project using Cenicafé’s local staff in Colombia, which evolved a model for farmer-scientist collaboration. This involved first encounters of knowing each other over some months, then training individual farmers after visiting them, leading to the farmers knowledgeably presenting the results after conducting the experiments for themselves. Agricultural economists have evaluated the cost effectiveness of the process.

Coffee Lessons in Ecuador. Anecafé project staff and extension workers coordinated village level teaching of simple coffee growing methods to children in two communities in the Cotopaxi province of Ecuador. Parents participated in discussions, and children enjoyed the practical and outdoor aspects of the coaching. They learnt very quickly how to set up and run a nursery and about interactive aspects of biology, agronomy and most importantly about cooperation. Such initiatives can be developed further for distance learning on accounts, Internet use, farm and non-farm commercialisation of livelihoods.

And in Colombia, farmers knew about the Internet and were keen to develop their own Website. The eventual impact is yet unknown, but it will give the farmers a chance to portray themselves as they see themselves – that people with scarce resources can also be organised and have far reaching ambitions. They hope to sell their own specialty coffee through the Web.

\textsuperscript{34} The protection from direct sunlight would result in even drying, and not having to remove or bag the drying coffee does not impede ventilation. Both factors result in better quality.
A Telecentre in Uganda is a resounding success in conjunction with the National Agricultural Research Organisation (NARO), and funding by CABI and the International Development Research Council – IDRC (Canada). The farmers are not at all averse to new technology. Local and international NGOs (ActionAid) and CBOs (Community Based Organisations) also participated. In Luwero and Mpigi districts, farmers started using the systems for personal and non-farm purposes, and quickly moved on to finding out coffee prices, and other coffee related information. The provider of the telecentre, with telephone, fax, e-mail and Internet services, also develops a business.

Farmer Field Schools (FFS) in Kenya built capacity in Integrated Crop Management (ICM). First developed for rice in South-East Asia, this concept is extended to other crops. In Kenya, a coffee and vegetable FFS was set up by CABI, Kenya Agricultural Research Institute (KARI), the Coffee Research Foundation (CRF), the Kenyan Ministry of Agriculture and the Kenyan Institute of Organic Farming. The Food and Agriculture Organisation (FAO) funded the project due to various concerns: environment, health and economic effects of expanding insecticide use in the Kenyan Highlands. Experiment based learning was in groups of 15-20 farmers meeting in the fields. Participatory Rural Appraisal put the emphasis on farmers suggesting and stimulating innovative ways, and also contributing to the costs of FFS. The ICM emphasis was mainly about the relationship between crop nutrition and pest tolerance. Group observations and discussions preceded decisions on options available. The group always met at a communal project field. Evaluation found greater farmer interest and innovation, and led to better bush vigour and reduced pesticide use. Considered a great success, the groups wanted to extend the methods to marketing of organic coffee.

Farmer Participation in India also had high success with similar field training systems in a CFC/ICO coffee berry borer (CBB) project. Demonstration plots were set up at various farms, and participation included women. Building on and adapting local practices, for instance thorough harvesting, including picking coffee droppings off the ground, CBB has been reduced considerably to less than 5 percent.

Low cost technology available today can easily link members of the coffee chain and be the leader in creating a transparent global community for the industry.

Dr. R. Naidu, Director of Research, Central Coffee Research Institute (Coffee Board of India), spoke on the “Research Priorities for Coffee in the New Millennium”.

Out of more than 50 producing countries, very few such as Brazil, Colombia, India, Kenya, and Indonesia conduct research in a meaningful manner. The industry has changed in most countries after independence and particularly in the last 10 to 20 years due to the decline of already poor infrastructure facilities and lack of expertise in fundamental research. The long life cycle and perennial nature of the plant generally hampers the speed of progress by traditional methods. In contrast, consuming countries are pushing frontiers of research on quality and health aspects. The producing countries need to reorient their research priorities to meet the new requirements under the WTO regime. Reduction of cost of production, with sustainability, and quality improvement are the three main priorities.

To reduce cost of production, normal research methods have not yet produced high yielding varieties with lasting disease resistance, especially for Arabicas. Crossing with older and distantly related species is difficult due to cross-genetic barriers. Complementing traditional research techniques with gene marker assistance may form a more expedient approach.

Intrinsic genetic contrariness of characteristics, such as increased disease hardiness reducing good quality attributes, also creates difficulties in achievement of all the desirable results. Modern methods also assist in identification of genetic manifestations.
Sustainability increasingly implies environmental and health friendly issues\textsuperscript{36}. Eco-friendly pest management and pollution control would mean increased costs. Research strategy should lead to cost effective practices integrating crop nutrition, pest and disease management, and effluent treatment. The integrated approach should include harmonious mixed cropping and diversification to enhance farm incomes.

Quality improvement is paramount, especially in oversupply situations. Health and hygiene measures are mandatory under the WTO Agreement on Agriculture, and research needs to urgently address the extent of contamination with mycotoxins (ochratoxin), pesticide and heavy metal residues. The finer taste qualities combined with production and marketing practices such as organic, eco- or bird-friendly, and Fairtrade are increasingly important and may eventually achieve up to 10 percent of the market share.

Quality improvement through farm level harvest and post-harvest technical support, to achieve higher incomes for farmers, should be made more easily available. Extension work should be integrated in terms of quality production and processing leading to standard set of practices for special coffees\textsuperscript{37}.

Conclusions. Producing country research has until recently been in isolation. Pooling the more advanced research on quality evaluation, biological control and use of molecular techniques would be very useful for producing countries. For instance free exchange of germplasm could help multi-country collaboration for common problems such as leaf rust, berry borer, and effluent disposal. Electronic information systems are one of the most effective modes of disseminating research findings and other information.

\begin{itemize}
\item Dr. Fernando E. Vega of the US Department of Agriculture (USDA), Agricultural Research Service, spoke on \textit{“The Coffee Berry Borer and Coffee Research at the United States Department of Agriculture”}, a paper compiled with Dr. Eric Rosenquist (USDA), who was unable to attend.
\end{itemize}

This paper concurs with Dr. Naidu about the lack of sharing and dissemination of information often leading to duplication of work. The USDA conducts research on two important interrelated subjects, agronomic problems of the growers and the transfer of information. Coffee production employs about 25 million people and related activities (processing, trade, roasting, transport, etc.) another 75 million people worldwide. Coffee is an important agricultural commodity and foreign exchange earner for many countries, with a total turnover of US$55 billion per annum.

Coffee berry borer is one of the worst coffee insect pests, and it is surprising that information about the USDA work in Latin America and Africa had not reached many growers, scientists, extensionists and coffee organisations. Dr. Cadena, Director of the National Coffee Research Centre (CENICAFE) in Colombia, has proposed the establishment of an International Coffee Research Centre. Other important agricultural crops have such centres. The International Maize and Wheat Improvement Centre (CIMMYT) in Mexico, and the International Rice Research Institute (IRRI), are 2 of the 16 such research centres under the Consultative Group of International Agricultural Research (CGIAR).

The USDA will continue to try and find new methods for combating coffee berry borer, and keep trying to ensure the efficient transfer of information. The USDA is also actively working towards forming a strong partnership with the US coffee industry to jointly identify priority areas on

\textsuperscript{36} In addition to social and human values.

\textsuperscript{37} Standardisation of specialty coffee production systems may be counterproductive. Certification and labelled grading would assist recognition and marketing of quality coffees with consistency.
research for sustainability of coffee, a crop currently in crisis. It is hoped that the setting up of an international centre for world coordination of coffee research would form one of the solutions for the crisis.

Chairman’s Closing Remarks

Dr. Jorge Cárdenas, Chairman, World Coffee Conference.

1. This Conference is taking place at probably the most critical time ever for the coffee industry.

2. This crisis has been particularly severe for the coffee growers who have seen their earnings substantially reduced in recent years.

3. The Conference has succeeded in re-establishing dialogue and analysis about the world coffee situation. It has brought together all the relevant actors: politicians, business and academic community, as well as multilateral agencies.

4. It has been emphasised that the crisis is of a structural nature with imbalance of supply and demand, resulting in a continuous price and income deterioration for coffee growers.

5. There have been strong appeals to find a concerted political solution for the socio-economic implications of the crisis. This requires new initiatives for facilitating growers to create better incomes for themselves.

6. To achieve the one repeated issue of increasing consumption, the vital actions are promotion and quality consistency.

7. Appropriate existing and new national and international institutions will play an important role in the development and implementation of the initiatives. The ICO and the ACPC are natural international conduits for dialogue and cooperation.

8. Globalisation is irreversible, only that the current concentrations of costs and benefits need to be better distributed for sustainable continuity without conflict.

9. Developing countries need a) better market access, b) fair competition, and c) access to financial resources and new technologies.

10. For sustainable development, the coffee industry requires a) increased productivity and value addition, b) strong and flexible institutions, c) access to market instruments for risk management, and d) provision of improved information systems to producers and consumers on subjects such as quality and health.

11. The Task Ahead is immediate action after this landmark Conference to create the means and the willingness from governments, coffee authorities and the business communities to explore all possible innovative ideas to emerge from the current situation and to create a better coffee world.

38 Inclusion of the private sector cooperation and participation is paramount to successful implementation.
ANNEX

THE QUEBEC DECLARATION

Introductory note

The Heads of State and Government of Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama and Paraguay, meeting in the city of Quebec on the occasion of the Third Summit of Presidents of the Americas, have adopted the following Declaration, which has been designated as:

“The New Coffee Age: an Undertaking for the American Countries”

The Heads of State and Government of these countries have decided to present this document as a contribution to the Agenda for the Summit and will agree on a coordinated approach to the expression of the positions it contains at the various working sessions.

Quebec, April 2001

Third Summit of Presidents of the Americas:
An undertaking on coffee

1. We, the Heads of State of the coffee producing countries of the region, on behalf of our people, will fulfill the aim of creating awareness of the world coffee crisis and proposing and promoting solutions to overcome it, which will contribute to the development of our countries.

2. We are living through the worst coffee crisis of the last hundred years. Export prices in constant US dollars are the lowest ever recorded and price volatility has increased significantly. The increase in production and the slow growth in consumption have led to a structural imbalance between supply and demand.

3. The economic and social consequences of this process are of grave concern and may affect political stability in some countries. In the case of countries in Latin America and the Caribbean, the coffee sector continues to be of vital importance in terms of economic growth, job creation, the balance of payments, income distribution and regional development, as confirmed by a number of studies carried out by the World Bank and other bodies.

4. During the 1980s, when the economic clauses of the International Coffee Agreement were in force, the final consumer spent US$30 billion a year on coffee. Of this total, producing countries received around US$9-10 billion a year (30-33 percent). According to estimates of the International Coffee Organization, consumers currently spend around US$55 billion and exporting countries receive less than US$7 billion (15 percent).

5. We wish to appeal to the 65 countries which will be meeting in London for the World Coffee Conference from 17-19 May 2001, to consider ways of overcoming this crisis. Our Ministers of Finance, External Trade and Agriculture will be given specific instructions to develop, in coordination with the national ministries and coffee authorities concerned and in a manner consistent with our international commitments, the following actions, which will be evaluated at a follow-up meeting to be held in September 2001:
a) To strengthen mechanisms for cooperation and consultation between producing countries in order to permit the application of measures designed to provide a concrete solution.

b) To invite the United States of America and Canada to resume their membership of the International Coffee Organization in order to permit, within the framework of that forum and in dialogue with producing countries, consideration of possible solutions to the coffee crisis.

c) To instruct Ministers to explore forms of consensus designed to cope with the problem, including regulation of supply and demand or measures such as the establishment of standards for export coffee.

d) To seek assurances from multilateral, world and regional credit agencies that they will not grant loans or grants designed to increase world coffee production.

e) To promote the creation of appropriate financial instruments for the regional multilateral banks which will permit the regulated management of world coffee supply, including price cover instruments and instruments for financing stocks in producing countries.

The carrying out of the initiatives and policies indicated above will enable producing countries to promote the establishment of a second-generation International Coffee Agreement.

6. This text will be forwarded to the Heads of State of the G7 countries, the President of the European Commission, the Secretary-General of the United Nations, the Presidents of the Inter-American Development Bank, the African Development Bank and the Asian Development Bank.

Signed by the Presidents of:

BOLIVIA
BRAZIL
COLOMBIA
COSTA RICA
DOMINICAN REPUBLIC
ECUADOR
EL SALVADOR
GUATEMALA
HONDURAS
MEXICO
PANAMA
PARAGUAY