# INTERNATIONAL COMMODITY POLICY: A NEW CONCEPT FOR SUSTAINABLE DEVELOPMENT

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### Summary

The context of international commodity policy is changing: the increasing globalization of markets, the changing role of governments, decentralization and regional integration processes, the widening scope of private sector activities and increasing urbanization all necessitate a new comprehensive concept. Economic development in all countries is dependent on the availability of commodities, and commodity markets are characterized by long-term price cycles and short-term price fluctuations. To stabilize commodity prices and to regulate market development, international commodity policy was introduced about 100 years ago. After the Second World War, the United Nations took responsibility for international commodity policy within the framework of trade conferences and in the 1970s the UNCTAD received the official mandate to develop and conduct this policy. Five main periods of commodity policy principles may be identified: 1948-1960 commodity market development (instrument: commodity agreements), 1961–1973 price stabilization (instrument: buffer stocks), 1974–1982 stabilization of terms of trade (instruments: production quota, indexation), 1983–1991 debt crisis management (instrument: export earnings compensation, diversification), 1992–2000 resources management (instruments: market transparency, environmental control).

Commodity markets display special features, in particular a diversity of quality, high market entry barriers, a limited lifespan of production facilities, and a low elasticity of supply. As a consequence, interventions in national and international commodity markets, such as quota systems and price regulations, which strongly restrict competition, have been accepted. The globalization and liberalization of various

economic sectors and a critical analysis of the characteristics of commodity markets show that the economic reasons behind regulations are weak.

The future commodity policy concept should be built upon four pillars or cornerstones: 1) coherence with trade, development, environment and technology policies; 2) a higher degree of market transparency via the strengthening of capacity of international commodity bodies; 3) the securing of fair competition and fair market access for newcomers, especially on the oligopolistic supply-side of the market; and 4) the observation of principles of sustainable development, focusing on state-of-the-art natural resources management.

# 1. Introduction: Commodities in the World Economy

Economic development in all countries is dependent on the availability of commodities. Commodities are basic requirements for nutrition, housing, transport and industrial production.

In international trade, commodities are natural raw materials, which are manufactured in primary production facilities, traded on an authorized commodity exchange, and commercially exploited by man. The three main types of commodity are: agricultural products (coffee, wheat, rice, cotton, rubber, tobacco, timber, etc.), mining products (iron ore, bauxite, copper, gold, clay minerals, etc.), and energy resources (petroleum, natural gas, coal, etc.). By dint of their nature, agricultural commodities are renewable, whilst mineral commodities, including fossil fuels, are non-renewable natural resources.

In the last two decades, world trade has tripled in value. Exports have increased from about US\$ 2000 billion in 1980 to almost US\$ 6000 billion in 2000. The trade in commodities has also demonstrated growth rates, albeit on a much more moderate scale. At the present, about 10 percent of world trade falls to agricultural commodities and another 10 percent to minerals (see Table 1). But many developing countries depend heavily on the export of one or two specific commodities. Examples are: Kuwait (petroleum: 98 percent), Libya (petroleum: 95 percent), Burundi (coffee: 88 percent), Zambia (copper: 93 percent), Jamaica (bauxite: 80 percent), Ethiopia (coffee: 80 percent), Ghana (cocoa: 60 percent), Guinea-Bissau (oil seeds: 55 percent), and Malawi (tobacco: 50.5 percent).

6	1980	1990	1997
Total imports	2045	3556	5471
Total exports	2001	3425	5337
OECD exports	1285	2455	3596
LDC exports	563	799	1547
Others (COMECON)	154	171	194
Agricultural products	n.a.	462	553
Mining products	n.a.	n.a.	502
Manufactures	n.a.	n.a.	4010

Table 1. World trade: selected statistics (US\$ billions) Source: WTO statistics 1998, Geneva, 2000 Major agricultural commodities are foodstuffs such as coffee, cocoa, sugar, bananas, meat, wheat, rice, oil seed and vegetables or industrial raw materials such as rubber, jute, timber and hides. Some agricultural commodities face tough competition from synthetic materials (rubber, see Table 2 and Figure 1); others are available in different qualities or types (coffee, see Tables 3 and 4 and Figure 2) and yet others are consumed mainly domestically (rice, see Table 5 and Figure 3). Major mineral commodities are metals such as iron, copper (see Table 6 and Figure 4), tin, lead, zinc, nickel, aluminum, or fertilisers such as phosphate rock and potash.

	1985	1990	1995	1996	1997	1998	1999
Production	6.80	4 40	5.12	6.04	6.40	6.42	6.61
(million tons) Natural rubber	0.80	4.40	5.12	6.04	6.40	0.42	6.61
Synthetic rubber	8.96	9.89	9.49	9.79	10.05	10.36	10.31
Export (million tons) Natural rubber	3.46	3.99	4.29	4.49	4.45	4.55	4.60

Table 2. World rubber statisticsSource: International Rubber Study Group, Kuala Lumpur 2000

	Туре	Production	Export
Country	R = Robusta	1000 bags	1000 bags
	A = Arabica	1999	1999
Brazil	A (85%)	27170	23135
Cameroon	R + A	1300	1154
Colombia	А	9300	9995
Costa Rica	А	2467	2196
Cote d'Ivoire	R	4167	2561
Dominican Rep.	Ā	1058	161
Ecuador	R + A	1533	988
El Salvador	A	2057	1894
Ethiopia	A	3833	1818
Guatemala	A (99%)	4500	4669
Honduras	A	3067	1987
India	A + R	4700	3671
Indonesia	R (90%)	7833	5084
Kenya	А	1433	1113
Mexico	А	6193	4358
Nicaragua	А	1304	983
Papua New Guinea	A (95%)	1286	1320
Thailand	R	1370	439
Uganda	R (87%)	4000	3841
Venezuela	А	1073	452
Vietnam	R + A	7500	7734
TOTAL	A + R	103223	83000

Table 3. Coffee statisticsSource: International Coffee Organization, London 2000

	US Cents/lb
Robusta	
cif New York (USA)	34.69
cif Marseilles (France)	33.96
Average	34.40
Arabica	
cif New York (Colombia)	85.50
cif New York (Brazil)	66.50
cif Hamburg	75.37
Average	71.84

Table 4. Coffee prices, November 2000Source: International Coffee Organization, London 2000

	1992	1994	1996	1998	199 9	2000
Production (million tons)	528	535	570	582	596	590
Cultivated Area (million hectares)	147	146	150	152	155	153

Table 5: World rice statistics Source: Rice Market Monitor, FAO, May 2000

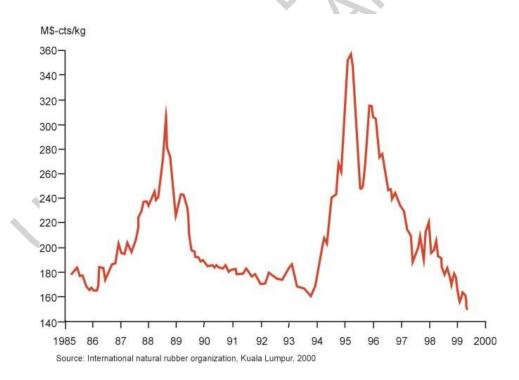


Figure 1. Rubber: Daily Market Indicator Price (Monthly Averages) Source: International Natural Rubber Organization, Kuala Lumpur, 2000

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	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Production (1000 t)	9025.3	8956.5	9099.4	9417.5	9474.4	9574.5	10179.8	11102.5	11486.8	12311.5	12.4
Export (1000 t)	5624.9	5954.1	6279.5	6707.8	6955.1	6965.2	7885.3	8774.4	9072	9050.3	n.a.
Price (average, cts/lb London)	129.1	106.1	103.6	86.7	104.9	133.2	103.9	103.2	75	71.4	n.a.

Table 6. World copper statisticsSource: Comision Chilena del Cobre, Santiago de Chile

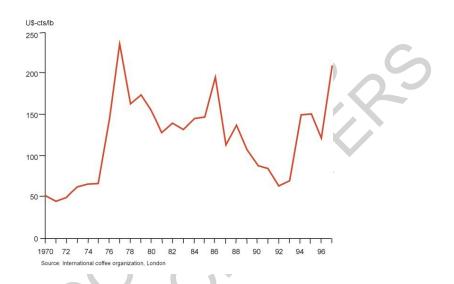


Figure 2. Coffee: Price for Mild Arabica Source: International Coffee Organization, London

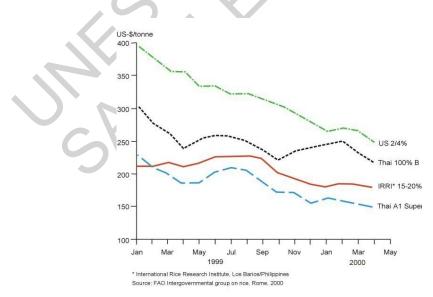
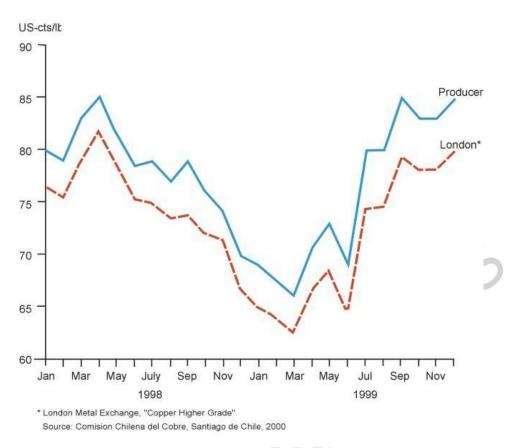
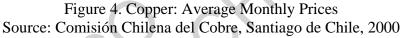


Figure 3. Rice: Export Prices Source: FAO Intergovernmental Group on Rice, Rome, 2000





The current situation and the trends in commodity production, trade and consumption could be summarized as follows:

- the share of commodities in world trade is decreasing;
- the share of regions in commodity trade is changing over time (see Tables 7 and 8);
- the commodity prices are characterized by longer-term cycles and short-term fluctuations. With the exception of rather short periods, supply is always higher than demand, and this leads to depressed prices;
- many less-developed countries depend on the export of commodities. Great efforts to change the export structure in these countries have shown only very limited results; commodity production costs are increasing, particularly in mining, because of the higher energy consumption and prices, in addition to increased costs for environmental control;
- the debt situation in commodity producing developing countries leads to an intensification of the output and, consequently, an oversupply on international commodity markets;
- commodity production has a great potential for environmental hazards and ecological effects;
- smallholders in agricultural production and small miners in mineral production are still important in many developing countries;

- seven of the 10 million persons employed in the mining business are working in small-scale operations (3.4 million in China, 0.5 million in India, 0.5 million in Indonesia, etc.);
- the increased globalization of commodity markets within the last 10 years since the integration of the former COMECON (Eastern Bloc) countries in Central-Eastern Europe and the Commonwealth of Independent States has changed the structures of almost all the commodity markets;
- many developing countries considered the commodity sector to be the key element of the economy and duly nationalized larger parts of the sector, particularly mining, in the 1950s, 1960s, and 1970s. About 10 years ago, the privatization of state-owned enterprises included the commodity sector. Today, most of the larger mining operations and many plantations are in the hands of multinational corporations.

	1990	1998
Western Europe	45.3	42.7
North America	19.7	18.1
Asia	17.4	18.0
Latin America	9.6	11.9
Africa	3.9	3.8
CEE + CIS	3.0	4.5
Middle East	1.1	1.0

Table 7. World Trade: share of regions in agricultural products trade (percent)Source: WTO statistics 1998, Geneva, 2000

	1990	1998
Western Europe	24.5	24.2
Middle East	22.4	18.2
Asia	13.6	16.5
CEE + CIS	8.1	11.8
North America	9.8	10.3
Latin America	10.1	10.1
Africa	11.4	8.9
Others	0.1	0.0
	•	•

Table 8. World Trade: share of regions in mining products trade (including energy)Source: WTO statistics 1998, Geneva, 2000

The United Nations General Assembly adopted a resolution on commodities at the 92nd plenary meeting in 1995, recognizing that in many developing countries the commodity sector remains the principle source of export revenues, employment, income and savings.

In the same resolution, the General Assembly confirmed the global mandate for international commodity policy of the United Nations Conference on Trade and Development (UNCTAD).

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### Bibliography

Christal A. and Lipsey R. (1997). *Economics for Business and Management*, 720 pp.New York: Oxford University Press[This is a basic source for international economics and management sciences.]

Common Fund for Commodities (1999). *Notes on the CFC*, 15 pp. Amsterdam: June 1999. [This document contains relevant information on CFC operations 1991–1999.]

Gocht W. (1996). Der Bergbau in Entwicklungsländern und das Konzept der nachhaltigen Entwicklung. *Geowissenschaften* 14(2), 59–62. Berlin. [This article discusses a new concept of sustainable development in mining.]

Gocht W. (1997). Mineral resources and the environment: the new concept of international commodity policy. *Colloquium Geographicum*, 23, 67–74. [This article presents a first approach towards a new concept of international commodity policy, focusing on environmental control.]

Gocht W. (1999). Die Rohstoff-Frage als politisches Problem, *Brockhaus Weltgeschichte*, 6, 548–557. [This contribution to an encyclopaedia provides basic information on policies related to commodity market development.]

Gocht, W. and Petersen U. (1994). Minerals and the common fund for commodities. Natural Resources Forum, 18 (2), 143–151. [This article provides a summary of the role of mineral commodities in the UNCTAD Integrated Program for Commodities.]

Gocht, W., Zantop H., and Eggert R. G. (1988). *International Mineral Economics*, 271 pp. Berlin, Heidelberg, and New York: Springer. [A textbook on international mineral commodities policy.]

Hartantyo B. and Smit H. P. (1993). *International Commodity Development Strategies*, 439 pp. Amsterdam: VU University Press [Comprehensive proceedings from an international CFC seminar on commodity policy measures.]

International Monetary Fund (2000). World Economic Outlook, 283 pp. Washington, DC: IMF.

IUCN/UNEP/WWF (1991). *Caring for the Earth: A Strategy for Sustainable Living*, 228 pp. Gland, Switzerland. [An updated version of the World Conservation Strategy of 1980, focussing on the ethics of sustainable living and proposals for transposing principles of sustainable development into practice.]

Mansfield E. (1996). *Microeconomics*, ninth edn., 590 pp. London and New York: W. W. Norton [This is a textbook on market structures and company behavior in specific markets.]

UNCED (1992). Agenda 21: Earth Summit. Rio de Janeiro, June. [The full text of the Agenda 21 adopted at the UN Conference on Environment and Development, 693 pp. June 1992, Rio de Janeiro, Brazil: United Nations.]

UNCTAD (1980) Agreement Establishing the Common Fund for Commodities, 30 pp. Geneva, June.

UNCTAD (1992). *UNCTAD VIII*. Analytical Report by the UNCTAD Secretariat to the Conference, 304 pp. New York: United Nations.

UNCTAD (1996). *Management of Commodity Resources in the Context of Sustainable Development: Social Impacts of Mining*. Bandung, October. [This document analyzes the main social impacts of mining and presents design and implantation solutions to related problems.] UNCTAD Secretariat (1997). *Emerging Commodity Exchanges: From Potential to Success;* Report. Geneva, June. [This document reviews the strategic choices, the organization, and the regulatory needs for establishing commodity exchanges in developing countries.]

UNCTAD Secretariat (1998). *Examination of the Effectiveness and Usefulness for Commodity-dependent Countries of New Tools in Commodity Markets: Risk Management and Collateralized Finance*. Third Session, Commission on Trade in Goods and Services, and Commodities, 18 pp. Geneva, February: United Nations. [This document discusses experiences, constraints, and effectiveness of modern financial instruments in commodity markets.]

UNCTAD (2000a). *Bangkok Declaration: Global Dialogue and Dynamic Engagement*, 10 pp. Bangkok, February.

UNCTAD (2000b). World Commodity Survey 1999-2000: Markets, Trends and the World Economic Environment, 344 pp. Geneva: United Nations.

UNCTAD (2000c). Handbook of World Mineral Trade Statistics 1993-1998. New York, and Geneva.

World Bank (1999). *Dealing with Commodity Price Volatility in Developing Countries. A Proposal for a Market-based Approach*, 95 pp. Washington, DC: International Task Force on Commodity Risk Management in Developing Countries. [This publication proposes international intermediation for dealing with commodity price volatility.]

#### **Biographical Sketches**

**Professor Werner Gocht** has taught at the University of Berlin and currently teaches at RWTH Aachen. He is a consultant to various mining and infrastructure projects in 12 developing countries. He has also conducted project and program evaluation for the German Government, the EU Commission, the World Bank, UNDP, ESCAP, and UNCTAD/CFC in more than 30 developing countries. He has been the moderator and chairperson of about 25 international conferences and workshops, and a member and chairperson of the Consultative Committee, UNCTAD Common Fund of Commodities (1990–2000). He is also Chairperson of the Advisory Council for Development of the German Federal Ministry of Economic Cooperation and Development, and coordinator of the European SE Asian University Network in Engineering (ESA-UNET). His fields of research include: international commodity markets, commodity policy, science and technology policy, environmental economics, transfer of technology; he has published 12 books and 135 papers in German and international journals.

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