UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT



UNCTAD/SUC/2011/5

FOREWORD

Commodities are at the heart of development. They are key export products for a large number of developing countries and have direct impacts on employment, rural poverty, and food and energy security. Recent events such as the food price crises of 2008 and 2010–11 have served as potent reminders of the impact of trends in the commodities markets not only on global economic growth, but on the long-term development prospects of low-income commodity-dependent developing countries and the survival of millions of their nationals – the so-called *commodities problématique*.

Accordingly, UNCTAD has always made commodity-related issues within the framework of trade and development one of its principal areas of work, notably facilitating the negotiation of a number of international commodity agreements in the 1970s. This priority has been strengthened in recent years with the establishment of the Special Unit on Commodities to help UNCTAD contribute more effectively to the efforts of developing countries, especially the least developed countries, to formulate strategies and policies to respond to the challenges and opportunities of commodity markets.

The Global Commodities Forum, which was initiated in 2010, is fast becoming an innovative and important part of UNCTAD's work on commodities. Supported by generous funding from many donors, it brings together several hundred stakeholders from along the commodity value chain. These range from producing-country policymakers and market regulators to producers, traders, transporters and financiers, giving them a platform to discuss and exchange views on various dimensions of the commodities problématique. It provides an opportunity for all players in the commodities trade to take stock of the situation and discuss emerging market trends. In addition, it allows for a dialogue on policy measures, their impacts and the changes needed or desired by the various stakeholders. The Forum also serves to inform and improve UNCTAD's work on commodities at all levels, from research to intergovernmental processes and technical cooperation.

Among the major themes addressed in this year's Forum were the increasing financialization of the commodities markets and its impact on commodity prices and producers. Participants and discussants noted that, although its long-term effects on prices were hard to isolate, it appeared that financialization had exacerbated commodity price swings. More fundamentally, the Forum clearly showed the need for drastic reform of, and large investments in, agricultural production if rising demand for food is to be met without severely harming the environment. It was also highlighted that relatively high prices for fuels and metals in recent years presented excellent opportunities for producing countries to increase the leveraging effect of commodity production on their long-term development.

In the sessions dealing with the support infrastructure for commodity markets, the issue of trade finance and how it might be adversely affected by new financial regulations was raised. The purpose of this report, which summarizes these and the other important trade and trade-related issues facing commodity supply-chain participants, is to help provide participants and other stakeholders with (a) a holistic picture of the evolving challenges and opportunities provided by commodity markets and (b) a range of policy measures that can be used by commodity producers to make the most of commodity production and trade. It is also an important contribution to UNCTAD's efforts to fulfil its mandate on commodities, which was renewed during its quadrennial conference in 2008.

I would like to take this opportunity to thank the numerous donors whose generous financial support has enabled us to bring together all the stakeholders to discuss one of the most important development challenges of our times. In particular, I would like to mention the Common Fund for Commodities, the Swiss State Secretariat for Economic Affairs and the Governments of France and China.

> Supachai Panitchpakdi UNCTAD Secretary-General

D. Paufodi

CONTENTS

I. INTRODUCTION	7
II. FINANCIALIZATION AND PRICE VOLATILITY	7
The financialization of the commodities markets and price volatility	7
III. AGRICULTURAL COMMODITIES	11
The state of the agricultural commodities markets	11
The environmental challenge	11
Reshaping global agricultural production	12
Making the market work for food security	13
Protection for the vulnerable populations	14
IV. MINERALS	16
Trends and challenges in the minerals markets	16
Challenges for producing countries:	
Transforming finite resources into sustainable development	17
V. ENERGY	20
The state of oil and gas markets	20
The challenges of financialization facing the hydrocarbon and energy markets	21
Policy challenges for producing countries	21
The environmental challenge	22
VI. COMMODITY TRADE FINANCE AND LOGISTICS	24
Commodity trade finance in the new trading environment	24
Shipping and international commodities trade	25
Support institutions for commodity finance	25
CONCLUDING REMARKS	27



I. INTRODUCTION

The Global Commodities Forum is a high-level platform, institutionalized in UNCTAD in 2010 to bring together stakeholders representing a wide range of interests, including civil society, industry, academia and international organizations, as well as member States. Its objective is to discuss informally and in a holistic way, key and perennial issues of the commodity economy. The aim is to promote an exchange of views and build consensus on the main challenges facing global commodity production and trade and on what needs to be done, particularly for commodity-dependent developing countries.

The second edition of the Forum was held in Geneva on 31 January and 1 February 2011, attracting around 600 participants from all stakeholder groups, including ministerial and other high-level policymakers, regulators, business leaders, experts, academics and representatives of non-governmental organizations.

The main themes addressed during the Forum's plenary and parallel stream sessions were commodity markets financialization and price volatility, policy

effectiveness in commodity-producing countries, commodity market regulation, commodity finance and logistics.

This report provides a thematic overview of the presentations and discussions, with an emphasis on practical outcomes and policy recommendations.

II. FINANCIALIZATION AND PRICE VOLATILITY

The financialization of the commodities markets and price volatility

Markets are essential institutions for many of the stakeholders involved in commodities, ranging from producers, processors and distributors to financiers and insurers. In particular, markets allow for the efficient processes of price discovery and risk mitigation. In the last decade, however, these markets have undergone a sea change. Massive inflows of capital have led to a process of financialization whereby the operations of actual physical traders have become dwarfed by those of financial traders. Coinciding with a time of high instability in commodity



prices, this process has generated a lively debate on the extent to which commodity price movements are directed by financial speculation rather than supply and demand fundamentals. The food price crises of 2008 and 2010–11, in particular, have drawn the world's attention to this issue.

Understanding and predicting commodity price movements has never been an easy task. The fundamentals of the different commodities markets are complex and rapidly evolving. In the current context, many commodities are experiencing steady increases in demand linked to global demographic and economic growth. The particularly rapid growth of China and other populous Asian countries is a major factor in this respect. Speakers at the Forum noted that the rise in demand has in many cases only partially been met by a lagging supply response, and commodity markets have experienced significant tightening. As a result, commodity prices tend to respond sharply to perceived changes in the pattern of supply and demand, such as natural disasters, climate change, political events, technological advances, investment cycles or trade restrictions. The multitude and complexity of factors that affect the supply and demand of commodities were described by many experts as being important drivers of volatility in commodity prices.

Beyond these supply and demand factors, the very nature of the commodities markets has changed over the past decade. Since 2000, when market regulators in the United States of America decided to deregulate over-the-counter (OTC) derivatives, there have been enormous inflows of capital into commodity markets. From \$6 billion in 2000, the value of commodity index swaps, exchange-traded commodity products and commodity medium-term notes rose to over \$350 billion in 2010. Commodities futures in particular have emerged as an attractive asset class that is viewed as a natural hedge against inflation and exchange rate losses. The effects of financialization on commodity markets are difficult to isolate from price movements, reflecting complex supply and demand factors. As a result, there is no consensus of opinion on this issue. Several of Forum participants affirmed that the increase in the liquidity of commodities markets improves their performance and makes them more efficient. Further, contrary to popular belief, commodities markets performed well during the 2008 crisis. In this perspective, far from being an example of market failure, the commodity price movements of 2008 were simply an accurate reflection of the pricing sentiments of market participants.

This view was countered by many other speakers who noted that there is in fact considerable evidence of irrational "herd-like" behaviour on the part of investors in commodity markets. The food price spike and crash in 2008 were not justified by changes in fundamentals; rather they were due to a speculative bubble. While the actions of speculative investors do not necessarily affect the long-term price equilibrium of commodities, there is evidence that they greatly enhance the magnitude of short-term price swings. As was very starkly illustrated by the price crisis of 2008, this behaviour creates enormous mismatches between private short-term returns and long-term social consequences as investors' speculation translates into widespread food insecurity, hunger, and malnutrition.

Another effect of the financialization of the commodities markets is the increased interdependence of the commodities markets as a result of the growth of commodity index funds. These funds, worth over \$200 billion in 2008, concentrate on the price movement of commodities as an asset class rather than on the price movement of individual commodities. This increases the spillovers from one commodity to another and leads to greater correlation between the prices of different commodities. As a result of this type of investment, individual commodity prices are increasingly decoupled from the fundamentals of their



own supply and demand as they are affected by the evolution of other commodities.

Overall, experts affirmed that the financialization of the commodity markets has made it more challenging to fully understand how commodity prices are formed and how they might evolve. In light of the changed nature of commodity markets, one speaker suggested that the standard conception of market fundamentals for commodities based on current supply and demand was no longer adequate. Instead, it should be expanded to include expected future supply and demand as well as financial drivers such as exchange rate movements.

The debate surrounding the effects of the financialization of the commodities markets has implications for market regulation. Several of the Forum's speakers asserted that markets are functioning effectively and that increased regulation would only result in reducing liquidity in the commodities markets, thereby impairing their price discovery and riskmitigation functions. They also warned of the risk of excessive regulation driving many market participants to riskier, unregulated markets. Other speakers emphasized the severe consequences that large price movements would have on the livelihoods of millions of people and affirmed the necessity of putting in place regulatory measures that limit excessive price volatility. In this view, managing the consequences of price volatility is not sufficient; there is a need to reduce its occurrence through regulation that takes better account of the real life impacts of commodity market price movements.

Among the regulatory measures that were suggested to reduce excessive price volatility were disclosure measures aimed at increasing transparency, deposit requirements and position limits for investors in order to limit speculative investment, as well as price variation ceilings to prevent excessive price changes over one trading day. Many of these measures are already being implemented in a range of regulatory reforms initiated notably as a result of commitments by the Group of Twenty to review market regulation in the wake of the financial crisis. In the United States, for example, the Dodd-Frank Wall Street Reform and Consumer Protection Act, which was passed in 2010, specifies aggregate position limits in commodities futures markets with the aim of reducing excessive speculation and market manipulation. In the European Union, several regulatory options are under review. These include measures to ensure better collateralization of investments, improved pricing of risk in derivatives, increased transparency requirements and a mechanism to move all OTC derivatives activity onto regulated markets (see box 1). Efforts are furthermore being made to harmonize commodities market regulation across countries. As these markets are becoming increasingly globalized, standardizing international regulation has become essential to avoid regulatory arbitrage on the part of investors.

More innovative and far-reaching measures to limit price volatility in commodity markets were also presented in the Forum. It was suggested that a combination of a small physical food reserve for a smooth response to food emergencies should be combined with a larger virtual reserve to smooth price fluctuations. The virtual reserve would be backed by funds and would intervene in futures markets to prevent price spikes and keep prices in line with fundamentals. Another proposal was to introduce a multitier transaction tax that would kick in when the risk of a speculative bubble is high and act as a circuit breaker. These innovative solutions are, however, both complex and costly. Additionally, the important interests at stake and the lack of consensus regarding the need for these interventionist measures make them politically controversial. A high and sustained level of political will and commitment would therefore be required to put them in place.

BOX 1

Regulatory responses in the United States and the European Union

In the United States:

- Position limits are already set in certain markets and these may be tightened.
- Position reporting, at least for the larger positions, has become a common practice.
- The Dodd-Frank Act introduces swap trading and clearing requirements, including registration requirements for dealers and participants; clearing of deals through designated exchanges and facilities; minimum capital requirements and aggregate position limits across OTC and exchange-traded derivatives.
- The Dodd-Frank Act introduces position limits for physical contracts with a view to establishing regulatory parity for these limits with OTC and foreign markets.

In the European Union:

- New legislation was passed to increase the central clearing of OTC derivatives, ensure the robust regulation of central counterparties and ensure complete reporting of trade-to-trade repositories.
- A review of market abuse legislation was conducted to clarify the notion of inside information in the context of commodity markets, to extend the regulation to OTC markets and to introduce the notion of attempt to manipulate market.
- A review of legislation was carried out to move OTC trading to organized trading platforms, introduce position reporting, enhance the market transparency and regulatory overview of OTC markets and set accountability position limits as well as hard position limits on derivatives when needed.



Machiko Nissanke, Professor of Economics, School of Oriental and African Studies, University of London "The spectacular rise and fall in commodity prices for 2006–08 cannot be explained in terms of market fundamentals alone."

III. AGRICULTURAL COMMODITIES

The state of the agricultural commodities markets

Agricultural commodity prices have rebounded sharply from the crash of late 2008 and are once again near their peak pre-crash levels. The current situation is, however, different from that of the 2008 price crisis and a renewed price crash is considered to be unlikely in the near future. The main reason for this is that the current high prices seem to better reflect the supply and demand fundamentals of the agricultural commodities markets. Poor harvests in key producing areas, notably the Russian Federation, Central Asia, and Western Europe, have reduced short-term supply in the past year, whereas the agricultural commodities markets are characterized by high and rising demand. This high demand arises mainly from the worldwide increase in population and rising living standards, especially in large emerging economies. In addition, technological advances have profoundly affected the demand pattern for a few key commodities such as maize and sugar. The increasing use of these crops for biofuels, using arable land for energy rather than food production, has had far-reaching consequences. The scale of the impact is increasing. It is estimated, for example, that the observed rise in grain consumption in the past few years can be almost completely attributed to the increased demand for maize linked to United States production of biofuels. These elements, which have driven demand in recent years, are long-term trends that are likely to generate further increases in demand in the foreseeable future.

Meeting this growing demand will require significant changes on the supply side. Agricultural production has suffered from chronic underinvestment for several decades in many areas of the world. This is due in part to the low commodity prices of the 1980s and 1990s that discouraged investment. In addition, agricultural production in many developing countries was disrupted by government neglect and underinvestment, often in response to policies imposed by international financial institutions that dismantled State support to the agricultural sector. Further damage was wrought by the heavily distorted nature of the international trading system that required many developing countries to open their markets, while continuing to allow developed countries to depress their agricultural prices through massive subsidies. The outcome of this neglect and underinvestment has been a lagging supply response and an increased vulnerability of production, notably to the effects of climate change.

As with other commodities, the agricultural commodity markets have been marked by rapid financialization in the past decade. Though there is lively debate regarding the nature and magnitude of the effects from this change (see section on financialization and volatility), indeed, this phenomenon adds a layer of unpredictability to the future evolution of the agricultural commodities markets.

The environmental challenge

Increasing agricultural production to meet expected levels of future demand is a daunting challenge. Nevertheless, it will not in itself be sufficient. Indeed, the scale of global environmental problems and their close interlinkages with agricultural production require that production increases be tackled alongside reductions in environmental impact.

Speakers at the Forum reasserted that agriculture is in the unique position of being one of the foremost victims of man-made climate change and one of its principal contributors. High temperatures threaten crop survival and promote pest proliferation, while



changes in rainfall patterns are already having severe impacts on production in many areas. Nonetheless, the agricultural sector contributes heavily to global greenhouse gas emissions. Estimates of its share of total emissions vary between 13 and 33 per cent and are mainly due to land-use changes, including deforestation, and methane emissions from livestock. These emissions are forecast to increase by 40 to 60 per cent by 2030 if no measures are taken to reduce them. In addition, agriculture is a major contributor to soil and water pollution in many areas due to the excessive use of chemicals and intensive monocropping.

The scale of the required change is immense, as are the consequences of inaction. One participant warned that a 3°C rise in global medium temperature could lead to a massive release of carbon from the soils, which at present constitute the world's largest carbon reservoir. To avoid this, it is estimated that a reduction of 50 per cent to 85 per cent in greenhouse gas emissions is needed. This cannot happen without a sizeable fall in agricultural productionlinked emissions. Reducing the environmental impact of agriculture needs to be a central aim of future efforts to increase production to meet global demand.

Reshaping global agricultural production

The scale of the challenge facing agricultural production to feed a growing population while reducing its environmental impact calls for radical changes. In this respect, the Forum was an ideal platform for many of the specialists and stakeholders to meet and share their vision of how this could be achieved. There is clearly an urgent need to move away from input-intensive monocropping in favour of a more holistic approach and production methods that emphasize diversity and sustainability.

This is central to meeting mounting demand while reducing environmental damage and will require wide-ranging changes in a number of aspects of production and of the agricultural commodity value chain.

Perhaps the largest change will need to come from improved resource management, especially with regard to soil and water. Many speakers underlined the impressive gains in both productivity and sustainability that can be attained through polyculture methods such as multicropping and intercropping. These methods have proved able to boost yields with a radically reduced need for chemical inputs while offering many benefits in terms of soil conservation. Better use of water resources, for example through water harvesting and other watershed management techniques, also holds great potential for increased productivity and resilience of production. It was also noted that, in some areas, irrigation can also generate rapid yield increases, notably for rice production.

In addition to these changes, improved plant selection can bring about greater productivity and resilience. Although it was argued that there had been too much focus on this solution for certain crops, it appears that there is still considerable potential to increase productivity through plant selection for many key crops such as sorghum or millet.

The required transformation of the agricultural sector cannot be achieved if the relative neglect of the agricultural sector prevailing for the past decades is not overturned. Governments will have to reprioritize agriculture and boost public spending in the sector. One participant noted that a surge in State support for agriculture in China, which included lower taxes, machinery subsidies and guaranteed minimal prices for crops as well as the



provision of infrastructure and knowledge, led to increases in both area and yield.

The international community also has an important role to play, notably by reversing the sharp declines in the share of international aid devoted to agriculture over the last 30 years. Experts addressing the Forum also called for incentives to promote increased private-sector investment in agricultural innovation.

Knowledge is key to improving agricultural production. There is an urgent need for increased research and development in sustainable yield increases suited to various contexts. Equally, the dissemination of knowledge through extension services needs to be greatly expanded. Participants emphasized that this was an area with considerable scope for South–South exchanges of experience and know-how. It was also suggested that innovative solutions, such as the use of mobile technology to facilitate extension services, should be explored.

Another important area for improvement is infrastructure. The lack of adequate infrastructure in many rural areas of the world hampers agricultural production and leads to major inefficiencies. It was estimated, for example, that up to 80 per cent of crop production is routinely lost or wasted even before it leaves the farm. This is compounded by further losses down the value chain at the processing, transport, distribution and consumer levels. Improving on-farm infrastructure as well as handling facilities further along the value chain could therefore have a large impact on reducing waste and thereby increase the amounts of agricultural commodities effectively available to consumers.

Several speakers stressed that efforts to improve agricultural production should primarily be aimed at small farmers rather than large commercial farms. Indeed, small farmers still account for over 50 per cent of global food production and there is often considerable room for improvement in their production methods. In addition, enhancing production at the level of these small farmers will have a widespread and direct impact on food security for many rural populations. Better access to credit, information and risk-management options will enable smallholder farmers to diversify and expand their production. Currently, many of them lack the means and the security to undertake large investments to improve their production. Strengthening producers' organizations can also help by giving farmers a more powerful voice in the agricultural value chain and helping them defend their interests.

Making the market work for food security

In addition to production issues, it is necessary to ensure that agricultural commodity markets at both the local and international levels help to improve conditions for producers and consumers alike.

At the local level, strong and open markets provide consumers and producers with an important mechanism to balance demand with supply. In particular, functioning markets should strengthen the flow of information allowing producers to adapt to changing conditions. Enabling smallholder farmers to access local and regional markets can contribute to improving food security. This was highlighted as an area in which mobile technology holds great potential.

At the international level, several speakers reaffirmed that urgent measures are needed to remedy the current situation in which farmers in developing countries are forced to compete with the heavily protected and subsidized production of developed countries. Additionally, the policy space of developing countries is curtailed by international trade rules, limiting their options for effective promotion of agricultural development. The Doha Round of international trade negotiations, even if it were to be concluded, was described by one participant as only yielding small gains in terms of subsidies reduction and improved market access. A much more ambitious plan for the rapid and significant removal of production subsidies in developed countries, better market access for all agricultural products originating in developing countries and especially least developed countries, and an end to food dumping are required to ensure fair treatment of small farmers in the developing world.

Beyond these considerations, several features of the global agricultural value chains discriminate against small farmers. The near monopoly of a handful of companies on the agricultural input market keeps the price of these inputs artificially high and often out of reach of small farmers in developing countries. The scale bias of many processors and marketing companies is equally damaging to small farmers. Tackling these issues can help small farmers achieve income security and allow them to invest in improved production methods.

Protection for the vulnerable populations

It is clear that transforming agriculture to meet world demand and reduce environmental degradation is an ambitious task and one that can only be achieved over time. Meanwhile, vulnerable populations will need to be protected from the worst aspects of food insecurity. The food crisis of 2008 serves as a potent reminder of the severe vulnerability of over one billion people to hunger and malnutrition. Any effort to improve agriculture and food production needs to take into account the needs of these populations. In particular, many speakers emphasized the clear need for reliable and effective early warning systems and safety nets for the most vulnerable (see box 2).

As climate change threatens to disrupt production with increasing frequency and on a large scale, new financing mechanisms for climate change adaptation and mitigation will also be necessary to improve food security in the worst-affected areas. In addition, the food aid system should be reformed to ensure that it does not serve as a mechanism for rich countries to dump their food production at below market price in a manner that harms local production in affected areas. An example of good practice in this regard is the World Food Programme's Purchase for Progress initiative that seeks to source relief food locally from smallholder farmers. In addition to purchasing their output, the project also helps farmers to access inputs and promotes the learning and sharing of knowledge.

BOX 2

Early warning systems and food security monitoring

- The Global Information and Early Warning System of the Food and Agriculture Organization of the United Nations was set up in 1975 and is the leading source on food production in the world.
- Historically, it has focused on crop monitoring.
- As of 2008, price monitoring has become an important means of warding off food insecurity. Market price monitoring now covers about 80 countries.
- In addition to crop and price monitoring, food security early warning systems should factor in household food access and utilization.
- Currently, crop monitoring is well handled and market monitoring is improving, but household food security monitoring is lagging behind.
- For medium- to longer-term estimations of the food security situation, the challenge is to adequately incorporate factors such as linkages with energy markets, urbanization, water shortages, climate change and new technologies.



Juan Gonzalez-Valero, Head, Public Policy and Partnerships, Syngenta. "Resource efficiency in agriculture is not a lifestyle choice – it is a necessity."



IV. MINERALS

Trends and challenges in the minerals markets

A growing demand for minerals, especially from China and other Asian economies, has marked the minerals markets for the past decade. Although the crash in commodity prices in late 2008 also affected minerals, prices have now largely recovered and most mineral prices are again above long-term averages.

Mounting demand has had a significant effect on prices owing to generalized underinvestment in supply capacity during the sustained low-price era of the 1980s and 1990s. The net result is that the stocks of many major mineral commodities are being drawn down, resulting in tightening markets with high and volatile prices. In addition, the financialization of the commodities markets has also affected price formation in the minerals markets (see section on markets and volatility). There is, however, considerable heterogeneity among mineral commodity markets regarding their outlook for the near future.

Iron ore and steel

The outlook of the iron and steel market is one of robust demand and slowly increasing supply. Experts addressing the Forum estimated that global steel production will rise 3.4 per cent annually on average between 2010 and 2020, with the bulk of the growth coming from India and China. With regard to iron ore production, Australia is set to remain the largest producer, with Brazil, second largest. Both Indian and Chinese iron ore production have potential, but it was emphasized that they suffer from severe problems linked to high production costs, resource depletion and poor ore quality that will need to be resolved if they are to boost local production. The Chinese iron ore industry in particular is floundering, with production falling in recent years. Globally, despite a rise in recent investments, supply should continue to lag slightly behind demand, putting upward pressure on prices. This pressure is likely to increase further if iron-ore producing countries continue to impose export restrictions such as those in India, China, Viet Nam, Malaysia and Argentina.

Several recent trends in the iron ore and steel markets will have an impact on the outlook of these markets in the coming decades. Speakers noted that there has been considerable consolidation in the iron-ore production industry with the three largest companies - Vale, Rio Tinto, and BHP Billiton – accounting singlehandedly for nearly one third of global production and over 60 per cent of seaborne internationally traded iron ore. The drive towards consolidation is expected to continue in the coming years, perhaps heightening the need for regulatory intervention on the part of governments to prevent anti-competitive behaviour. Partly as a result of industry consolidation, there has been a reversal in roles as iron ore producers have become price makers while the steel industry has become a price taker. The large iron-ore producers have also changed the pricing arrangements for iron, moving them from annual price negotiations to quarterly pricing and are expected to move them to monthly negotiations in the coming months. Coking coal, an essential input to steel production, has also experienced price deregulation and price surges due principally to China's transition from self-sufficiency to net importer status. These market trends were described by experts as being likely to contribute to increasing prices and heightened volatility in the coming years.



Copper

Like iron and steel, copper production has failed to keep up with demand in recent years, leading to significant market tightening, falling stocks and price levels reaching record highs in early 2011. It is expected that this situation will prevail for the next few years, possibly leading to a severe copper market squeeze. Specialists warned, however, that a history of high price volatility in copper makes it difficult to make accurate predictions about future price movements in this market.

Speakers said that the longer-term outlook for the copper market would be characterized by a probable easing of supply constraints as large investments in production bear fruit. The obstacles to bringing new production online are daunting and may well yet exacerbate the supply and demand imbalance. Indeed, the size of investments needed for exploring and developing new mines has been increasing in recent vears - investments of \$2 billion to \$5 billion are not uncommon. Further, such investments are mobilized for a long time and are therefore vulnerable to changes in the market or in the political environment. Experts pointed out that many mines now produce lower quality ore that only becomes viable to exploit over a certain price threshold, making this production highly vulnerable to price changes. These features may make the investment less attractive. This is especially true in the current context of financial markets, which is marked by increased competition for capital and an emphasis on low risk and liquidity.

Nickel and zinc

The outlook for both nickel and zinc is one of fairly stable prices in the coming years. Nickel prices peaked in 2007 and have only partially recovered from the subsequent fall. High stock levels make a strong increase in prices unlikely in the near future. Prices for zinc peaked in 2006 and have remained fairly stable since, with supply expected to outpace demand in the coming years.

Challenges for producing countries: Transforming finite resources into sustainable development

The high prices of many mineral commodities and the large investments expected in production offer golden opportunities for mineral-producing countries. For these countries, the main challenge is to transform these opportunities into long-term economic and social development. The Forum was addressed by government ministers and officials of several developing country mineral producers. In order to transform the extraction of finite natural resources into durable improvements in social and economic conditions, they said that there was a need for both revenue management and longer-term strategies to maximize the impact of the extraction sector on the rest of the economy.

The first challenge that countries face with regard to revenue lies in negotiating mining concessions with international extraction companies. Several speakers pointed out that in the past, mineral-rich countries have often offered generous conditions to mining companies in order to attract scarce investment. As a result, many of these countries have not benefited from the recent price hikes as much as they should have. The expected increase in investments, driven by sustained demand, should allow producing countries to find more balanced agreements with mining companies that ensure them a fair deal, while remaining attractive to investors.

Another key revenue management challenge described by participants is that of managing volatility. Indeed, the revenue that countries derive from mining is tied to the prices of the extracted commodities on the world market. The high volatility of these prices therefore has a direct influence on revenue. High prices create a risk of inflation and Dutch-disease scenarios that affect the prospects of non-extractive economic activities. Low prices, however, can cause heavy revenue losses. Policymakers from producing countries therefore emphasized the need to put in place prudent fiscal regimes to manage revenue fluctuations and prevent their economies from suffering repeated boom-bust cycles due to price shocks (see box 3). In the longer term, prudent fiscal management will allow the creation of financial and physical assets that can be used to generate diverse and sustainable income. There is a need for greater transparency in the world minerals markets to improve information flows and enable producing countries to better understand the dynamics of price fluctuations and improve their risk management.

Beyond revenue management, mineral-producing countries need to maximize the impact of mining activities and strive to use them in a way that promotes wider and more sustainable development. Experts pointed out that in many producing countries, the resource extraction sector is a key contributor to foreign investment and exports, yet it remains an enclave activity with few linkages to the rest of the economy. As a result, the sector's contribution to employment and national income tends to be fairly limited. The experience of many mineral-rich countries clearly shows that the linkages between resource extraction and durable improvements in economic and social conditions are not automatic, but need to be induced and supported. Experts and policymakers agreed that the key to maximizing the impact of mining on the producing country's economy is to increase its effect on employment. It was suggested that one of the ways to achieve this is by building clusters of complementary activities around mining. Local and national authorities can, through careful industrial planning, seek to promote the establishment of activities that will allow an increasing proportion of the mining industry's needs to be met through local procurement. Authorities can promote the establishment of such clusters by providing infrastructure and energy. Also key is the development of human resources to adequately meet the needs of the mining industry and its complementary activities. Providing incentives to process more minerals locally can also be an effective way of increasing local employment and revenue generation in the sector, provided that tariff escalation in importing countries does not prevent it. Overall, however, there are many examples of countries successfully using resource extraction as a base for wider and more sustainable development. These positive experiences should be shared and promoted more actively, especially since the number of mineral export dependent countries is growing. Although the challenges are great, these positive examples show that the resource curse is not inevitable.

BOX 3 Managing mineral revenue fluctuations: The experience of Peru

- Peru's gross domestic product (GDP) nearly tripled in nominal terms between 2000 and 2010, making it one of the fastest growing economies in the world.
- It is one of the largest producers, and has some of the world's largest reserves, of silver, copper and zinc.
- Overall, mining accounts for 61 per cent of exports.
- As a small and open economy, it is highly vulnerable to shocks. Peru's terms of trade have a direct impact on its GDP as well as its fiscal balance.
- The Peruvian Government has therefore implemented a prudent fiscal policy with a conservative estimate of long-term mineral prices.
- As a result, it entered the crisis with considerable reserves that had been amassed during the high price years that preceded it and was able to finance a stimulus plan without any adverse budgetary implications.
- Because its fiscal management strategy, it is estimated that a 35 per cent drop in world mineral prices would now only result in a 1.7 per cent fall in fiscal revenues as a share of GDP. This is lower than all but two Latin American countries.
- Peru now has the largest international reserves relative to its GDP in Latin America, significant public savings and a drastically reduced public debt.
- The country is therefore in an ideal situation to benefit from the expected high prices and increased investments in the sector.
- Using its natural resource endowment as leverage for economic development, Peru expects to continue experiencing rapid growth and improvements in social welfare. The percentage of Peruvians living in poverty fell from 50 per cent to less than 33 per cent between 2000 and 2010.



Benjamin Aryee, Chief Executive Officer, Minerals Commission, Accra, Ghana "Mineral commodity policy should ensure that even though the resources become exhausted with use, they serve as a catalyst for sustainable development."



V. ENERGY

The state of oil and gas markets

Crude oil prices have recovered from the crash of late 2008 and the excess stocks that had accumulated during the lower price interval are being worked off. Experts believe the long-term outlook for the oil market will essentially be defined by how technology and investment in supply capacity respond to the expected increase in demand over the coming decades. Additional determining factors include the role of financial investors in fuel markets, inventory levels and political turmoil in many producing areas, notably the Middle East, which may cause significant price volatility. Additionally, the energy sector faces great environmental challenges which will greatly affect its long-term outlook.

Speakers agreed that demand for hydrocarbon-based fuels would remain robust in the next few decades. In 2010, global oil demand rebounded by almost 3 million barrels per day from the recession low of 2009. Global energy demand is forecast to grow by 30 to 40 per cent by 2030. Developing countries, especially in Asia, are expected to be the main drivers of this increase. China alone has accounted for over half of the increased demand for energy in the past decade and is expected to account for around 40 per cent going forward. Despite the efforts under way to increase the use of renewable energy sources, fossil fuels are expected to continue to represent around 80 per cent of the global energy mix in the coming decades. The scale of the estimated growth in energy demand for the next decades will therefore require large increases in hydrocarbon fuel supply capacity.

Proven global oil reserves are expanding and production is likely to grow, notably because of spare capacity in Saudi Arabia and heightened production in Iraq. Additionally, it is estimated that there is significant potential for capacity expansion in many countries outside the Organization of the Petroleum Exporting Countries (OPEC). Africa, for example, is thought to have large, untapped potential for deepwater oil resources. Overall, oil reserves are believed to still be large enough to meet expected demands for several decades. High prices make the exploitation of many more expensive non-conventional resources viable, thereby further increasing potentially exploitable reserves.

Bringing these reserves into production is a sizeable challenge. One speaker estimated that the total investments in exploration and production required to meet increased demand up to 2030 will amount to over \$25 trillion. The extent to which these investments are made, and whether they are made in a timely manner, will essentially determine much of the outlook for oil and energy markets in the medium term. Any significant lag in supply will worsen energy poverty in the poor areas of the world and push energy prices up. Several participants expressed serious concern, as lasting high energy prices could significantly impair the prospects for a global economic recovery.

Another key factor affecting the energy markets will be the evolution of natural gas production. In recent years there has been an exceptional increase in the supply of natural gas coming largely from the exploitation of shale gas sources in the United States. This production is now large enough to make the United States selfsufficient in natural gas; experts addressing the Forum warned that it may radically change the whole natural gas market. Indeed, the rapid increase in supply has put a downward pressure on prices and raised calls to decouple the price of gas from that of oil. It is still not clear, however, to what extent this will happen. Equally unclear is whether or not the presently fragmented markets for natural gas will move towards a unified global market. The outlook for natural gas is therefore somewhat uncertain, even if the successful exploitation of shale gas in the United States, and its potential exploitation in many other countries, is likely



to result in a lasting increase in the share of natural gas in the global energy mix.

The challenges of financialization facing the hydrocarbon and energy markets

The rapid financialization of the commodities markets will also influence the evolution of the energy and hydrocarbons sector in the coming years. Oil markets in particular have attracted large amounts of capital as investors have sought hedges against inflation in a context of weakening dollar exchange rates. The consequences of this trend are strongly disputed. There is, however, considerable evidence that speculation in the commodities markets tends to exaggerate price movements (see section on financialization and volatility).

Several speakers expressed the belief that extreme price volatility in fuel commodity markets would have to be tackled to promote investment in supply expansion. Indeed, the size and long-term nature of investments needed require some degree of predictability regarding future price levels. In this respect, improved market information is essential. Increased data transparency, dialogue and shared analysis among market players in both the physical and financial markets should lessen the uncertainties conducive to volatility. The international nature of the oil market also calls for international coordination and the standardization of market regulation to prevent regulatory arbitrage on the part of investors, which could induce further price volatility. Initiatives to enhance transparency, stakeholder dialogue and international cooperation are, in fact, already under way through the International Energy Forum, which brings together the members of the International Energy Agency, OPEC and other stakeholders.

Policy challenges for producing countries

Fuel-producing countries will be central players in managing the future supply of hydrocarbons. As such,

they will need to adapt to new challenges. This will in many cases require a significant reform of national oil or gas companies to guarantee efficient national custodianship of hydrocarbon resources. An expert on these companies stressed that they need to take on enhanced roles in finding and using new technologies, developing national capacities and reducing the environmental impact of production. However, they will not be able to carry out these roles without improved access to capital and human resources or significant decisional autonomy. If this transformation can be achieved, they should be in a better position to enter into partnerships with international oil organizations that are mutually beneficial to producing countries and oil companies alike.

Producing countries also face a longer-term challenge. Like mineral-producing countries, they need to use the exploitation of non-renewable resources to promote long-term sustainable development. This will require a great degree of fiscal prudence in order to manage price fluctuations and a long-term strategy to effectively use the revenue in a way that promotes development and creates growth drivers outside the oil sector.

One of the most pressing challenges for developing producers is diversification. country energy Participants from fossil-fuel-producing countries highlighted that – even more than mineral producers - they tend to be heavily over-reliant on the fossil fuel sector, leaving them highly vulnerable to price shocks or disruptions in production. Nigeria offers a good example of the challenge faced by oil-producing countries. It relies on the oil sector for 90 per cent of its export earnings, 95 per cent of its foreign exchange earnings and 82 per cent of its budgetary revenue. The high degree of vulnerability stemming from this situation was revealed following the price spike and crash of 2008 that led to currency depreciation and severe impacts on the private and financial sectors from which the country has yet to fully recover.

The environmental challenge

The environmental footprint of energy is a major global concern, and efforts to reduce it will mark the coming decades. This will have an impact on the outlook of the fossil fuel commodity markets in several ways. There may be direct impacts in the form of environmental regulations that restrict certain forms of production or consumption. Restrictions or bans on deepwater oil drilling, tar sands exploitation or shale gas production could, for example, have a significant impact on the supply of fuels. Similarly, changes in United States biofuels legislation have a direct impact on oil demand.

Environmental considerations may also have more indirect effects on hydrocarbons. The increasing push for improved energy efficiency is likely to reduce the demand for fuels at least marginally. Also, even though renewable sources now account for only a very small portion of the global energy mix, this is set to increase in the coming years. Indeed, participants suggested that the growing interest of major stakeholders in the energy field, particularly in China, in renewable sources of energy suggests that there will be significant growth in this area in the near future. The effect on hydrocarbon producers will probably be greater in terms of competition for investment and subsidies than through a direct impact on demand.

Speakers presented a number of environmentally driven initiatives that are gaining ground in several countries and regions. The European Union has introduced a 20-20-20 strategy that aims to lower greenhouse gas emissions by 20 per cent, increase

the share of renewables in the energy mix by 20 per cent and gain 20 per cent in energy efficiency, all by 2020. This and other similar measures are putting pressure on hydrocarbon producers to improve their environmental record. In this respect, experts also presented some promising technological avenues such as technologies for carbon capture and storage or enhanced oil and gas recovery (see box 4). These technologies, however, are in the early stages and will require considerable investments if they are to create a significant impact.

Overall, it is clear that environmental considerations will be a key concern of the energy sector in the coming years. There will be strong pressure to improve the efficiency and cleanliness of energy and this will have an effect on hydrocarbon markets. How far these initiatives will go, and how much impact they will have, are open questions. At present, there do not appear to be sufficient or sustained levels of political will that are needed to bring about rapid changes in energy production and consumption patterns. The achievement of a low-carbon development path remains a distant goal. The plethora of local, national, and international initiatives to reduce carbon emissions are all steps in the right direction, yet the need for a global framework remains as pressing as ever. As things stand, hydrocarbons are expected to continue dominating the energy mix for the foreseeable future and limiting global warming to 2°C, as agreed by countries at the United Nations Climate Change Conference in Cancun in 2010, is appearing all but impossible.

Ali Ibrahim Al-Naimi, Minister of Petroleum and Natural Resources, Saudi Arabia "We have heard talk about peak oil for decades, but peak demand may well arrive before we ever reach a peak in supplies."

BOX 4

Technological solutions for increased efficiency in fuel production: oxy-fuel combustion



- The maturation process of an oil or gas field goes from primary development (simple fuel extraction) to secondary development (injection of water to force more fuel out).
- These methods are commonly used; at present the extraction rate varies between 35 and 37 per cent, whereas the theoretical maximum is estimated to be around 75 to 80 per cent.
- To push the extraction rate further, enhanced oil or gas recovery techniques are used. These refer to the injection of carbon dioxide or other chemicals into the oil or gas reservoir. These techniques can significantly improve the extraction rate, as well as remove carbon dioxide from the atmosphere, but the high cost of carbon dioxide is an obstacle.
- An innovative solution to this problem involves the use of a modified rocket engine, or oxy-fuel combustor that converts a range of fuels into pure water and carbon dioxide while producing electrical power. The carbon dioxide produced is very pure and can be almost fully captured.
- This solution provides a clean energy source and provides carbon dioxide that can be used for enhanced oil or gas recovery.
- This would present the oil and gas industry with an opportunity to better handle greenhouse gas emissions, while boosting recovery rates by up to 50 per cent.
- The solution is both more effective and requires less capital investment than most other carbon capture and storage methods.



Ali al-Shahristani, Deputy Prime Minister for Energy Affairs, Iraq "There is broad acceptance that volatility in the oil market in the past three years was driven by speculation and not by market fundamentals."



VI. COMMODITY TRADE FINANCE AND LOGISTICS

Commodity trade finance in the new trading environment

Commodity trade finance is an essential part of trade in commodities. It supports 80 to 90 per cent of all commodity trade flows in one way or another and provides essential risk management options to the involved stakeholders. The importance of trade finance for commodity trade was highlighted during the recent financial crisis, which led to a very rapid reduction in available pre-export and pre-shipment finance. The scarcity of finance was a major factor in the ensuing severe decline in actual trade flows. Export volumes from China to Europe and the Americas, for example, fell by 40 per cent. Trade finance experts present at the Forum warned that despite this important function, trade finance is likely to be severely affected by the new financial regulatory regime that is being put in place. This could potentially create a sizeable barrier to the global economic recovery that is expected to be driven by international trade.

Financial markets have come under intense scrutiny following the financial crisis of 2008. Many new regulatory measures are being put in place and these will have an influence on commodity trade finance. One of the principal aims of these regulatory measures is to reinforce the health of banks and other financial institutions to limit the risk that their vulnerability creates for the economy. New regulations call on banks to increase their core capital, raise their liquidity levels and limit their leverage ratios. As banks and other financial institutions are required to retain more capital, the amount available for lending is restricted. As a result, speakers pointed out, there is increasing competition for capital including within financial institutions between different activities. It has thus become more difficult to find capital for trade finance. Many banks and other financial institutions that were previously active in trade finance have ceased these activities.

This difficulty has been exacerbated by the treatment of trade finance in the new regulations. Experts noted that, even though trade finance played no part in the financial crisis and indeed functioned adequately throughout, it has been lumped in with risky activities to which high regulatory requirements are applied. This was largely due to the status of trade finance as a small and relatively unknown niche activity, whose specific attributes were not adequately taken into account by regulators. Further, new regulations on derivatives trading also have liquidity impacts for trading companies that hedge their transactions. These tight regulatory requirements make it difficult to obtain capital for trade finance.

Experts affirmed that these new regulatory requirements are largely unwarranted in view of the safe record of trade finance in the past. Commodity trade finance provides funds for commercial deals that are of prime strategic importance for stakeholders, be they importers or exporters. As a result, there is very little incidence of default in trade finance transactions.

The challenge is to make the case for a better regulatory treatment of trade finance in a more forceful way. Speakers suggested that trade finance activities should be reclassified as an asset class of its own with appropriate national and international regulation to allow it to perform its essential duties. In the mean time, all flexibilities available in national and international regulations should be used to prevent a situation in which the availability of trade finance becomes a bottleneck to international trading activity.

Appropriate regulation of trade finance will allow new players to engage in this activity and take up the shortfall created by the many institutions that have abandoned it. Chinese banks were seen as having considerable potential in this respect. Specialist trade finance funds operating on the model of hedge funds could also become effective agents in increasing available finance in this sector. There are only few such funds operating today, however, and a significant increase in activity is not expected in the near future.



Shipping and international commodities trade

Transport costs – especially shipping costs – are key determinants of many commodity prices. Compared with average import tariffs, for example, shipping costs are about half as high as average import tariffs for manufactures, nearly as high for crude oil and agricultural commodities, and over three times as high for raw materials. Trends affecting the cost of shipping commodities therefore have an important direct influence on commodity prices.

Shipping costs have remained fairly stable over the past decades. Several factors have nonetheless affected these costs in recent years. The large growth of traded volumes over the past decade has sharply increased the demand for shipping, especially dry-bulk and container shipping. The shipping industry's supply response to this rise in demand has suffered a considerable time lag. in large part due to the time and sizeable investments needed to build new ships. The net result has been a price spike as supply lagged behind demand, followed by a price crash as the situation reversed. The current situation is therefore one of a relative oversupply in the shipping industry. Speakers familiar with the shipping industry expected this situation to last for several years to come, because of continuing new supply currently on order books. As a result of the oversupply, freight costs as a share of the landed price of commodities are at an all-time low.

The oversupply of ships is not the only factor influencing trends in shipping prices. Another key factor is the change in global trade patterns. Participants noted that the shift in the world's economic centre of gravity towards East Asia has caused the demand for shipping miles to grow faster than international trade, which means that trade is becoming more mile-intensive. This has implications for shipping prices. The average number of days at sea for ships has increased with consequences for costs. Every additional day spent at sea has been estimated by one expert as adding 0.4 per cent to the final price of the shipped goods. Additionally, shipping has become less efficient, owing to the trade imbalance between China and the rest of the world. A dry-bulk or tanker ship transporting commodities to China from Brazil, for example, will generally have to return without cargo, making the round trip relatively inefficient. Port congestion is equally a major concern. As ports are generally less efficient in the developing world, this adds considerable time inefficiencies for ships that often have to wait several days to load or unload their cargo. The upgrading of port infrastructure and procedures should therefore be a priority for Aid for Trade and other means of trade facilitation.

The price of shipping fuel has been rising in recent years, with major consequences for shipping costs. There is indeed a clear correlation between the price of shipping fuel and the cost of raw material freight prices. This correlation is also present in a moderate fashion for oil tankers, but is not significant for container or grain trade. The effects of an increase in shipping fuel prices are not only differentiated by cargo type, but also according to the size and remoteness of markets. A long-term change in fuel prices will therefore lead to shifts in the global pattern of trade as it affects the competitiveness of different markets in different ways. These effects were, however, expected to remain marginal in most cases.

Support institutions for commodity finance

Insurance

Commodity trade finance relies on a number of support institutions to function efficiently. Among these, credit insurance plays a major role by facilitating risk management for financial institutions engaging in commodity trade finance.

Speakers noted that, in recent years, there has been an explosive increase in the use of credit insurance, especially by banks. This is partly due to the favourable treatment of credit insurance in Basel II regulations. As a result, the number of insurers offering credit insurance for commodity trade has nearly doubled, and premiums are currently estimated to be worth in excess of \$10 billion.

The credit insurance industry was strongly tested by the global crisis. Claims on credit insurers more than doubled between 2008 and 2009. Claims made on political risk insurance in 2009 and 2010 alone were worth nearly half of all claims made over the past 25 years. Overall, the insurance market responded well and it is estimated that 95 per cent of non-payment claims were paid in full. The impact on the insurance market was considerable, but recovery prospects are good. The capacity of insurers is expanding and experts affirmed that private insurers had come out of the crisis even stronger than they entered it. There is nonetheless a risk that new regulations emerging from Basel III will reduce the attractiveness of credit insurance for banks, thereby severely affecting the prospects of insurers.

Inspection

Inspection companies perform important risk management functions in commodity trade finance. By monitoring commodity transactions at a variety of key points in the value chain, they provide an essential service for many stakeholders. The role of inspection companies is changing in many areas as they specialize more intently on pure monitoring activities. This is driven by a general movement of all stakeholders involved in commodity trade transactions towards greater specialization. There are still many regions, however, where commodities trade markets remain poorly developed. Against this backdrop, the timetested collateral-management-agreement approach, whereby the inspection companies control the entry and exit of physical goods from warehouses, remains the operative standard.

Documentation

The increasing complexity of commodity trade transactions generates a large volume of documentation. Even simple transactions involve a dozen different parties, generating an intricate web of documentation. At present, these documents are generally not standardized and there is a considerable amount of duplication. Increased standardization of key documents therefore can lower the transaction costs involved in commodity trade transactions. Similarly, moving towards common dematerialized platforms could improve efficiency significantly. Experts noted, however, that the system is too big and too complex to be changed all at once. Acting on the major bottlenecks, as well as on areas in which so-called quick wins are achievable, can nonetheless already yield large efficiency gains.



Peter Sargent, Head of Transaction Banking Europe, ANZ, London "There is relatively less capital likely to be available to banks (for trade finance) at the same time as governments are expecting to use world trade to pull the economy out of recession."

CONCLUDING REMARKS

The diverse sessions and presentations of this year's Forum have highlighted the sharp increases in demand for commodities arising from expanding population and economic growth. Meeting this demand presents a huge challenge that will define the food and energy security of many, especially in developing countries. This challenge is also exacerbated by the uncertainty created by the heightened financialization of the commodities markets, as well as by the need to reduce the impact of commodity production on the environment.

Looking forward, the Forum's discussions have highlighted a number of action areas that will be crucial. The worst excesses of the financial markets will need to be curbed to ensure that speculation does not threaten the livelihoods of millions of people around the world. Agricultural production will need to be fundamentally reformed, with an emphasis on small farmers in order to ensure the world's food security, while reducing the severe impacts of production on the environment. For many commodity export-dependent countries, diversification of the economy remains an important objective, and policies that increase the impact of the extractive sector on development, notably through employment, need to be actively pursued. Finally, the most vulnerable populations will need to be protected from the most severe impacts on their livelihoods as long as the above-mentioned issues are not resolved. This will require better early warning systems and a swift response in the event of food shortages. It will also require putting in place basic safety nets for the most vulnerable members of society and climate change mitigation policies.

The challenges are indeed daunting. But the human and economic costs of failing to tackle these pressing issues in commodities production and trade are unacceptably high.



ANNEX: PROGRAMME – GLOBAL COMMODITY FORUM 2011

OPENING SESSION

Statements by heads of international agencies on the importance of multi-stakeholder dialogue on the perennial issues of commodities to find better policy frameworks and market mechanisms for the future global commodity economy

Speakers:

- Mr. Supachai Panitchpakdi, Secretary-General, UNCTAD
- Mr. Luis Manuel Piantini Munnigh, President, Trade and Development Board, UNCTAD
- Mr. Pascal Lamy, Director-General, World Trade Organization
- Mr. Hamadoun I. Touré, Secretary-General, International Telecommunication Union
- Mr. Ali Mchumo, Managing Director, Common Fund for Commodities
- Mr. Andrey Vasilyev, Deputy Executive Secretary, United Nations Economic Commission for Europe

PLENARY: COMMODITY MARKETS AND POLICIES

PLENARY SESSION A1: The state of energy markets: Lower volatility and a new price zone for hydrocarbons?

Moderator:

Mr. Noé van Hulst, Secretary General, International Energy Forum *Speakers*:

- Mr. Hussain Al-Shahristani, Deputy Prime Minister for Energy Affairs, Iraq
- Mr. Ali Ibrahim Al-Naimi, Minister of Petroleum and Mineral Resources, Saudi Arabia
- Mr. Richard Jones, Deputy Executive Director, International Energy Agency
- Mr. David Peniket, President and Chief Operating Officer, ICE Futures Europe, London

PLENARY SESSION A2:

The state of agricultural markets: The drivers of increased volatility

Moderator:

Mr. David Hallam, Director, Trade and Markets Division, Food and Agriculture Organization of the United Nations

Speakers:

- Mr. David Nabarro, Special Representative on Food Security and Nutrition,
- United Nations High-level Task Force on the Global Food Security Crisis
- Mr. Terry Townsend, Executive Director, International Cotton Advisory Committee



- Mr. Etsuo Kitahara, Executive Director, International Grains Council
- Mr. Lindsay Jolly, Senior Economist, International Sugar Organization
- Mr. José Sette, Acting Executive Director, International Coffee Organization

PLENARY SESSION A3:

The state of selected metals market: Fundamentals, non-fundamental factors and terms of trade

Moderator.

Mr. Kabine Komara, Former Prime Minister, Guinea

Speakers:

- Mr. Fernando Toledo, Vice-Minister of Economy, Peru
- Mr. Per Storm, Managing Director, Raw Materials Group, Sweden
- Mr. David Cox, Vice-President, Metals Economics Group, Canada
- Ms. Helyette Geman, Director, Commodity Finance Centre, University of London and ESCP Europe

PLENARY SESSION A4:

Commodity markets volatility and their interconnectedness: How much volatility and correlation is there?

Moderator:

Mr. Christopher Gilbert, University of Trento, Italy

Speakers:

- Mr. Roger Janson, Trading Manager, Cargill, Geneva
- Mr. Philippe Chalmin, Cyclope and University Dauphine, Paris
- Ms. Machiko Nissanke, School of Oriental and African Studies, University of London
- Mr. Ke Tang, Renmin University of China

PLENARY SESSION A5:

Overcoming excessive market volatility through better regulation, data and transparency

Moderator:

Mr. Sujiro Seam, Deputy Director, Food Security and Economic Development, Ministry of Foreign Affairs, France

Speakers:

- Mr. Michael Dunn, Commissioner, Commodity Futures Trading Commission, United States
- Mr. Hannes Huhtaniemi, Internal Market and Services Directorate General, European Commission
- Mr. Martin Abbott, Chief Executive, London Metal Exchange
- Mr. Bryan Durkin, Managing Director and Chief Operating Officer, CME Group, Washington, D.C.
- Mr. Anthony Belchambers, Chief Executive Officer, Futures and Options Association, London
- **Mr. Rafael Plata**, Head of Derivatives and Post-Trading, Federation of European Securities Exchanges, Brussels



PLENARY SESSION A6: Commodity policy challenges for oil and gas-exporting countries

Moderator:

Mr. Giacomo Luciani, Princeton University Global Scholar

Speakers:

- Mr. Sergey Komlev, Head of Contracts Structuring and Pricing Department, Gazprom Export, Russian Federation
- Mr. Babafemi Oyewole, Executive Director/Chief Executive Officer, APPA Fund, Benin
- Mr. Christian Häberli, Senior Research Fellow, World Trade Institute, University of Bern
- Mr. Alexander Epishov, First Deputy Director-General and Chief Analyst, Moscow International Energy Forum

PLENARY SESSION A7: Commodity policy challenges for minerals and metal-exporting <u>countries</u>

Moderator:

Mr. Leonard S. N. Kalindekafe, Chairman, Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development

Speakers:

- Mr. Dashdorj Zorigt, Minister for Mineral resources and Energy, Mongolia
- Mr. Paulo Estivallet de Mesquita, Head, Economic Department, Ministry of External Relations, Brazil
- Mr. Gift Chimanikire, Deputy Minister of Mines, Zimbabwe
- Mr. Benjamin Aryee, Chief Exectuive Officer, Minerals Commission, Accra, Ghana
- Ms. Kathryn McPhail, Senior Programme Director, ICMM, London

PLENARY SESSION A8:

Trade and other policy options for modernizing agriculture in developing countries

Moderator:

Mr. Samuel Gayi, Head, Special Unit on Commodities, UNCTAD *Speakers:*

- **Mr. Jumanne Abdallah Maghembe**, Minister of Agriculture, Food Security and Cooperatives, United Republic of Tanzania
- Mr. Franck Galtier, Senior Economist, CIRAD, France
- Mr. Martin Khor, Executive Director, South Centre, Geneva
- **Mr. Cui Qifeng**, Institute of Agricultural Economics and Development, Chinese Academy of Agricultural Sciences, China



PARALLEL STREAM B

Sustainable supply and demand, innovation and early warning systems

PARALLEL SESSION B1: Long-term sustainable supply and demand and technological innovation: hydrocarbons and other energy

Moderator:

Mr. Rouben Indjikian, Executive Director, Global Commodities Forum, UNCTAD Speakers:

- Mr. Frank Convery, University College, Dublin
- Mr. Paul Welch, Chief Executive Officer, Chariot Oil and Gas, London
- Ms. Valérie Marcel, Associate Fellow, Chatham House, London
- Mr. Stanislav Zhukov, Head of Energy Research Centre, Institute of World Economy and International Relations (IMEMO), Moscow
- **Mr. Alexander Wostmann,** Founder and Chief Executive Officer, Alexander's Gas and Oil Connections, Limbach, Germany

PARALLEL SESSION B2:

Long-term sustainable supply and demand in the energy sector: Developing early warning systems

Moderator:

Mr. Richard Jones, Deputy Executive Director, International Energy Agency

Speakers:

- Mr. Noé van Hulst, Secretary General, International Energy Forum
- Mr. David Fyfe, Head, Oil Industry and Markets Division, International Energy Agency
- Mr. Giacomo Luciani, Princeton University Global Scholar

PARALLEL SESSION B3:

New technologies and commodities: Agriculture

Moderator:

Mr. Andrey Kuleshov, Senior Project Manager, Common Fund for Commodities *Speakers:*

- Mr. Fanta Kaba, Secretary General, Foundation MIR, Guinea (no presentation recorded)
- Mr. Edward Pulver, Irrigation Advisor, Latin American Fund for Irrigated Rice, Columbia
- Mr. Juan Gonzalez-Valero, Head Public Policy and Partnerships, Syngenta, Basel
- Mr. Ulrich Hoffmann, Chief, Trade and Sustainable Development Section, UNCTAD



PARALLEL SESSION B4:

Long-term sustainable supply and demand, technological innovation and early warning systems for food security

Moderator:

Mr. Samuel Gayi, Head, Special Unit on Commodities, UNCTAD

Speakers:

- Mr. Arif Husain, Deputy Chief, Food Security Analysis Service (ODXF), United Nations World Food Programme, Rome
- Mr. Cheng Fang, Economist, Food and Agriculture Organization
- Mr. Jason Potts, Programme Manager, Sustainable Markets and Responsible Trade Programme, International Institute for Sustainable Development. (Not present: Presentation made by Mr. Ulrich Hoffmann)
- Mr. P. J. Philip, Chairman, National Institute of Technology, India
- Mr. Jonathan Hepburn, Programme Manager, Agriculture, International Centre for Trade and Sustainable Development

PARALLEL SESSION B5: New technologies and commodities: Energy

Moderator:

Mr. Karl Jeffery, Chief Editor, Digital Energy Journal, London

Speakers:

- Mr. Pieter Kapteijn, Director of Technology and Innovation, Maersk Oil and Gas, Copenhagen
- Mr. Robert Tippman, Associate Director, EcoSecurities, London

PARALLEL SESSION B6:

Forecasting trends and strengthening early warning systems for producers, investors and other supply chain participants

Interactive panel



PARALLEL STREAM C

Commodity finance, risk management and logistics

PARALLEL SESSION C1:

Current trends and the next frontiers for commodity finance

Moderator:

Mr. Jacques Olivier Thomann, Global Head of Structured Finance, BNP Paribas (Suisse) and President, Geneva Trading and Shipping Association

Speakers:

- **Mr. Jean-François Lambert,** Global Head, Sales and Risk Management, Trade and Supply Chain, HSBC, London
- Mr. John MacNamara, Global Head of Structured Commodity Trade Finance, Deutsche Bank, Amsterdam
- Mr. John Turnbull, Global Head of Structured Trade and Commodity Finance Group, SMBC, Europe, London
- Mr. Pierre Lorinet, Chief Financial Officer, Trafigura, Geneva
- Mr. James Parsons, Portfolio Manager, Bluecrest Capital, London
- Mr. Peter Sargent, Head of Transaction Banking Europe, ANZ, London

PARALLEL SESSION C2:

The emerging regulatory environment and trade finance: New challenges and opportunities for banks and other financiers

Moderator:

Mr. Andrey Kuleshov, Senior Project Manager, Common Fund for Commodities *Speakers:*

- Mr. Andrew Cornford, Observatoire de la Finance, Geneva
- Mr. Gilles Thieffry, Partner, GT Law, Geneva
- Mr. Alexander R. Malaket, President, OPUS Advisory Services International Inc., Toronto

PARALLEL SESSION C3: Support institutions for commodity finance

Moderator:

Mr. John MacNamara, Global Head of Structured Commodity Trade Finance, Deutsche Bank, Amsterdam *Speakers:*

- Mr. Anthony Palmer, Director, BPL Global, London
- Mr. Matthieu Delorme, Cotecna Trade Services S.A., Geneva
- Mr. Marc Lapointe, Regional Vice-President, Europe, Africa and Middle East, Certispec Service, Cameroon
- Mr. James Fierro, Executive Chairman, Recipco Holdings Ltd., Vancouver



PARALLEL SESSION C4: Shipping and international trade in commodities

Moderator:

Mr. Jan Hoffmann, Chief, Trade Facilitation Section, Division on Technology and Logistics, UNCTAD *Speakers:*

- Mr. Robin Smale, Director, Vivid Economics, London
- Mr Robert Haggquist, Dry Bulk Analyst, Clarksons, London

- Ms. Jane Korinek, Trade and Agriculture Directorate, Organization for Economic Cooperation and Development

- Mr. Herman de Meester, European Communities Shipowners Association, Brussels
- Mr. Paul Mallon, Director of Legal Affairs, Bolero, London

PARALLEL SESSION C5:

Commodity futures markets: Do they obscure underlying market realities or provide long-term signals and management tools?

Moderator:

Mr. Martin Abbott, Chief Executive, London Metal Exchange, London *Speakers:*

- Mr. Robert Ray, Managing Director, International Products and Services, CME Group, London
- Ms. Tanushree Mazumdar, Senior Economist and Vice-President, NCDEX, Mumbai
- Mr. Mike Davis, Director of Market Development, ICE Futures Europe, London

PARALLEL SESSION C6:

Risk management in commodity markets: Paper and physical markets and the realities of commodity exporters

Moderator:

Mr. Sergey Komlev, Head of Contracts Structuring and Pricing Department,

Gazprom Export, Russian Federation

Speakers:

- Mr. Michael Ndoping, General Manager, Cocoa and Coffee Board, Cameroon
- Mr. Bharat Kulkarni, Head of Trading Operations Ethiopia Commodity Exchange
- Mr. Andrey Konoplyannik, Consultant of the Board, Gazprombank, Russian Federation
- Mr. Ivan Kopytin, Department of Financial Markets, IMEMO, Russian Federation