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This is a shortened version of a longer paper with many diagrams available from the author.

### **THE WORLD IN 2015 ACCORDING TO JOHANNESBURG**

by Markku Wilenius, Turku School of Economics <sup>1</sup>

The conference in Johannesburg tried to look at the world from three different vantage points:

#### **Population Growth, Ageing and Migration**

According to recent estimates, the population of the earth will grow from currently over six billion to 7.2 billion people in 2015.

We should note that only one million of the total global increment of 83 million in 2000 happened in the industrialised world. In some countries, such as Italy, the population is actually decreasing. The affluent industrial countries also suffer from a considerably ageing population. This will in the next few decades have a dramatic impact on the dependency ratio in many countries.

The important, and in part particularly worrying, thing about population growth is that 95% of it takes place in the urban regions of developing countries, while, at the same time, the absolute growth of the population in Europe is already beginning to decline. The most significant growth will, in the light of present trends, take place in South and South East Asia, where many new megalopolises will emerge. Population growth in the future will increasingly happen in areas where people already have the greatest difficulty earning a living. More than one billion people are living in slums. Current trends indicate that, after no more than one generation from now, nearly five billion people will live in urban environments, making the control of urbanisation one of the crucial strategic issues in sustainable development.

We can also expect the mobility of the world population to see a dramatic increase over the next 15 years. Already at present, in over 50 countries 15% or more of the population are refugees. Despite all attempts to curb it, this new Diaspora will escalate, particularly

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in Europe, where a greater workforce is needed to offset the ageing population and declining birth rate. In the developing countries, the challenges of increased migration combine with ethnic conflicts, unemployment and illegal migration, which in turn will lead to more unrest and a greater need for international cooperation. One special problem relating to human resources, the brain drain from the developing world, is already prominent in a world of widening welfare gaps. The explosive spread of HIV / AIDS, especially in sub-Saharan Africa, can in some countries result over the course of the next 15 years in no less than 30 to 40 years' decrease in the average life expectancy of the population.

The most significant counter-measures decided on at the Johannesburg Summit, with respect to the stabilisation of development, involve, firstly, improving access to clean water and development of sanitation systems, so that, by 2015, the number of people in the world not covered by these services would have been halved. These are formidable goals, especially if we take into account that, according to some estimates, already over half a billion people are suffering from a chronic lack of clean water, and that under the present growth ratios their number is estimated to grow to 2.8 billion by 2025.

### **Imminent Environmental Crises and Crises in Food Production**

The absolute amount of crops produced in the world has increased continuously and forecasts indicate that it will continue to do so in the future. The fact that gives cause for concern is that the *per capita* production of cereals is forecast to decrease during the next decade. The primary cause for concern is not, however, the global sufficiency of crops, but the division of its use.

At the Johannesburg Summit, the developing countries brought up time and again the, from their viewpoint, great inherent injustice of agricultural subsidies in the industrialised world. The subsidies not only prevent developing countries from having equal access to the markets, they also result in subsidised agricultural products being dumped on the developing countries when the demand in the industrial countries' own markets is not high enough. Consequently, the developing countries demanded the removal of the agricultural subsidies of the industrialised countries. It is clear that, if a sustainable world is to be a reality in 2015, the current system of subsidies must be radically changed by that date.

The adequate supply of clean drinking water was one of the crucial issues of the conference, and no wonder: It is estimated that nearly half the world's population in 2015 will live in areas that suffer from severe water stress. History teaches us that insufficient water reserves have in the past resulted in more co-operation than conflicts. But the situation can in the next 15 years change dramatically for the worse, as more and more countries find themselves with a chronic shortage of water, as indicated by recent forecasts. Already, over 30 countries get more than a third of their drinking water from outside their borders. This trend will considerably increase the mutual dependency of states. Also within the EU, where the first serious steps have now been taken towards a common water policy, there will be considerable insufficiency of water, especially because of chronic drought on the Iberian Peninsula.

Trend forecasts show both good and bad prospects for energy use and consumption. The good thing is that energy efficiency increases continuously, both in industry and in traffic. We can also observe that services and information technology, the areas of most dynamic economic growth, use fairly little energy compared to heavy basic industry.

On the other hand, economic growth coupled with population growth may lead to a 50 % increase in energy consumption between 2000-2015. Total oil consumption may grow from 74 million barrels per day in 2000 to 100 million barrels in 2015.

## Deepening Globalisation of the World Economy

The growth will most likely be greatest in Asia, especially in China and India. In the light of current trends, Asia will be responsible for over half the increase in energy consumption, and in 2015 it will already have surpassed North America as the largest consumer of energy in the world. In the light of these trends, it is clear that we must hurry, globally, to make the transfer over to the use of renewable energy production in all possible ways .

The Johannesburg plan of implementation offers very few weapons for combating these trends. Initially, the EU in particular advocated the adoption of quantitative targets for renewables by 2015, but because of the opposition from the OPEC countries and the USA, all numeric targets were struck from the plan. Now the main threat is that the transition to the next paradigm of energy production will happen too late.

The mitigation of greenhouse gas emissions over the next 15 years will undergo some slight improvement, provided the Kyoto Protocol is ratified by enough countries, even though the change is hardly reflected in emission forecasts. There are plans to launch, during the latter half of the present decade, negotiations about the targets of second commitment period that would extend beyond 2015. These targets would have a greater effect on global emissions and as well on. The most important contribution of the Johannesburg Summit to the prevention of climate change is that Russia, Canada and India declared that they would make every effort to ratify the treaty as soon as possible.

In the light of current trends, the destruction of forests will continue at roughly the same rate as in the 1990s, that is, nearly 100,000 square kilometres a year, or 2.4% of global forest cover per decade. Practically all major forest depletion takes place in the tropics, and even though depletion in Asia has, in part, been stopped by artificial reforestation, the situation in Africa, in particular, would in the light of present trends still seem to be growing worse in 2015. Forest depletion is primarily caused by the spread of agricultural land, even though fellings by international forestry corporations do give cause for serious concern.

Against this background, the article in the Johannesburg plan of implementation where the signatories commit to the achievement significant reductions in the loss of biodiversity and to turn the present trend of over-consumption of natural resources to a sustainable level, is quite ambitious indeed. As the attached Living Planet Index of the WWF shows, this trend has already been strong for a number of decades, and the turning of the trend will entail a huge effort on the part of mankind.

Perhaps the most important single motive force for the development of the economic dimension of globalisation is the increasing growth rate of the middle class; by 2015, there will be more than two billion middle-class people in the world, which in itself will entail a continuous increase in consumption. At the same time, pressures will also increase for democratisation and attainment of a stable political situation all over the world.

We may also assume that systems of economic control will develop in the future and that inflation will remain under control better than before. On the other hand, market volatility can also increase as a result of increased and more transparent information. The structures of the economy will dematerialise, grow increasingly weightless, as information and knowledge become an increasingly important source of economic added value, technology raises the value added of products, and copper cables are replaced by fibre optics. In other words, the weight of the economy will be considerably less in relation to its volume in 2015 than today.

The most important Finnish initiative in the Johannesburg process and its plan of implementation – the commitment to prepare a ten-year programme for bringing production and consumption patterns in line with the principles of sustainable

development – could, at best, be the crucial link through which this major motive force could better be harnessed to the promotion of sustainable development. In other words, we might, at best, have a situation where economic growth would no longer correlate – as it does currently – with the growth of material production. Considering that we can anticipate the economic growth rate in the industrialised countries to be around 3% up until 2015 and even about 7% in the developing countries, such a "delinking " of economic growth would, from the viewpoint of sustainable development, be crucial.

I believe that effecting this delinking hinges crucially not only on nation states with their politicians and active consumers, but above all on businesses. The corporate world was strongly represented in Johannesburg. The main message was that businesses would join the disconnection effort on a broad front when it becomes for them a "business case". Therefore, it is the responsibility of states to ensure that taxation and other normative systems have been adjusted so as to benefit businesses that operate in an environmentally, socially and economically responsible manner.

It is here that Finland, as a initiator of the programme, could set an example and provide a model of action that could be made into an international standard in 2015. In spite of the international recognition it has gained in this, Finland remains in the first stages of the process.

The triumphal march of the market-driven economy will undoubtedly continue in 2015 and this will further increase international trade and investments. The growing diffusion of information technology into the economy will increase productivity in the most developed countries. The dynamic development of the private sector will accelerate. Competition will grow tougher, markets will become increasingly transparent. Helped along by communications technology, best practices will rapidly spread around the globe. Enclaves of a "Fourth World" will emerge in different parts of the world and inside countries. This will, in turn, further increase international crime, which began to grow at an explosive rate in the 1990s.

By 2015, if current trends continue, Asia will be increasingly central in the development of the world economy. China, in particular, will by then have most likely risen to an equal position with the USA and the EU. India, too, will rise, and will by 2015 have become a critically important producer of information technology.

Such Asianisation of the global economy will, in the future, have a profound effect on the achievement of the targets of the Johannesburg plan of implementation. The Johannesburg plan of action clearly states that globalisation contains both threats and opportunities. The development of world trade under the aegis of the WTO into a clearly more equitable direction than at present is probably the most important instrument for steering globalisation. Some progress was achieved at the end of 2001 in the WTO Conference in Doha, where agreement was reached on "development rounds" and the integration of the environmental aspect in the WTO process. Furthermore, the UN financing conference in Monterrey in spring 2002 and the resultant Monterrey Consensus seek to create a framework for the emergence of a sustainable world, where the monstrous legacy of colonialism in the relations between the industrial and the developing world with its enormous debts and various forms of protectionism, would have been "wiped away".

## **Conclusions**

It is obvious from the above that mankind faces formidable challenges. The utilisation of natural resources in production and consumption must be made more efficient and decreased in scope. Moreover, the shift to considerably more efficient recycling is also mandatory. The balance of the last 50 years is shocking: the total world consumption of oil, steel, coal and wood grew by 45 per cent from 1950 to 1995. The tentative investment

in new energy sources should during the next 15 years develop into a veritable energy revolution, a third revolution to parallel the coal-based energy revolution in the 19th century and the oil revolution of the 20th. In absolute terms, most estimates indicate that mankind has, since 1950, used more natural resources than in the course of all previous history. In a time frame of 50 years, we must increase tenfold the efficiency of resource use (Factor 10 thinking) by dematerialising production and the delivery of products and services, and by moving the main focus of economic activity from material goods to services.

What we need, in other words, is a radical change of direction. Most studies assessing the carrying capacity of the planet indicate that we no longer have even one generation left. Mankind must adapt its activities to such dimensions as are called for by sustainable development. In particular, the programme for changing consumption and production habits adopted in Johannesburg aims at this.

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