



**Bank of Papua New Guinea**

**PRESENTATION BY  
MR. LOI M. BAKANI, GOVERNOR  
AT THE CONSULTATIVE IMPLEMENTATION & MONITORING COUNCIL  
WORKSHOP ON  
*THE LNG PROJECT AND PNG ECONOMY, WITH PARTICULAR REFERENCE  
TO THE AGRICULTURE SECTOR***

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**Acknowledgement**

Honourable Ano Pala, Minister for Agriculture and Livestock

Honourable Mr. Warren Dutton, Chairman of CIMC Agriculture Sectoral  
Committee

Mr. Anthony Yauiieb, Deputy Secretary, Treasury Department

Mr. Paul Barker, Director, Institute of National Affairs

Ms. Marjorie Andrew, Executive Officer, CIMC

Ms. Laura Bailey, World Bank Country Manager

Ladies and gentlemen

I am pleased to have been invited to make a presentation at this forum. The topic of discussion is an important one at this juncture of developments in the country. It is timely to discuss it. I take serious note of the focus on the implications on agriculture sector of the LNG project.

My paper draws on the findings of a study done in 2010 jointly by the Bank of PNG and the Monash University (Melbourne) on the impact of the PNG LNG project, as well as the latest policy issues that have emerged amongst relevant Government bodies and authorities, including issues raised in the Bank's Monetary Policy Statement of March 2011 (about which I made a breakfast presentation this morning, hosted by the PNGID, and to be released through the media tomorrow.)

### **Introduction**

During the construction phase of the PNG LNG project, the sectors of the PNG economy that supply material inputs and will be involved in activities directly and indirectly with the project will benefit. These sectors include manufacturing, building and construction, transportation and communications, commerce (wholesale & retail- especially equipments and vehicles) and service industries such as hoteling. There are other sectors such as the agriculture/forestry/fisheries that will not benefit directly from the project. The project has the potential to significantly raise standards of living in PNG. However, it will generate structural adjustment pressures. How the rest of the country, including the agriculture/forestry/fisheries sector where majority of our people live, benefit will depend on: (i) macroeconomic management of the Government, specifically how the Government manages the windfall revenue from the project during the production stage; and (ii) monetary policy stance in reaction to movements in liquidity, inflation, exchange rates, and interest rates.

There is a lot of hype about the size of the project and the huge money, involved- A\$12 billion for construction-phase expenditure in 2010-2012 and

annual exports averaging A\$4.0 billion (in 2010 prices) (taken from the study done by BPNG and Monash University, 2010, based on ExxonMobil funded 2008 ACIL Tasman study and information supplied by ExxonMobil in 2010). However, it has to be understood that the bulk of the setup expenditure will be on imported inputs and short term foreign labour. The joint paper by Monash and BPNG argues that what is important for the PNG economy is the expenditure out of that total amount on domestic supplies, by firms households and labour, which will total around A\$1.8 billion (K4.5 billion) over the three years of construction (BPNG & Monash, 2010). Similarly, the project will generate substantial export revenue for PNG and have an enormous effect on Gross Domestic Product (GDP). Again, from the point of view of the PNG economy, this is largely irrelevant. The LNG exports receipts will be owned by overseas based entities. What is relevant for PNG is the taxes, dividends and royalties that will accrue to PNG Government, and landowners which will be in the range of a low of K2.0 billion a year to a peak of K14.0 billion a year (ibid). Another way of putting this point is to recall that welfare in a country depends on its GNP (a measure of its income), not GDP (a measure of quantity of output that takes place within its borders). What matters most after receiving the revenue, is how the Government manages it to benefit the rest of the country, without creating an economic environment in which growth in liquidity of the banking system and in inflation do not spiral out of control.

**What Can the Government Do for the LNG Proceeds to Benefit the Agriculture Sector and Mitigate the ‘Dutch Disease’ Effect?**

The means through which the LNG project can benefit the rest of the country, including the agriculture/forestry/fisheries sector, is the expenditure of the LNG induced Government revenue through the National Budget process. But it has to be prudent fiscal management with emphasis on development and productive expenditure through a fiscal strategy that ensures investment and consumption expenditures grow steadily (conservative approach) over the years of the project life span. The fiscal strategy should not be one where there is aggressive spending over and above the revenue with the Government borrowing against future revenue or one that the Government spends all it gets in a year each year over the life span of the LNG project. The prudent conservative spending approach will see some savings and accumulation of assets by the Government over time while allowing for welfare of the people to improve through improvement of infrastructures of transport, education, health and law and order.

### *Real Exchange Rate*

Let me first define a couple of economic terms that matter for the topic of the forum. Real exchange rate refers to movements in the nominal exchange rate adjusted for differences in the rate of inflation in PNG and the rates of inflation in PNG's principal trading partners. Movements in the real exchange rate facilitate changes in exports and imports. Real appreciation decreases the rate of growth of exports and increases the rate of growth of imports. Real depreciation has the opposite effect. '*Dutch Disease*' refers to an economic condition where a mineral boom leads to an appreciation of the real exchange rate, which in turn depresses output in the tradeable sector. The real exchange rate appreciation can occur in two ways. First, a surge in export from the mineral sector leads to an appreciation of the nominal

exchange rate, resulting in a rise in the domestic prices of tradeables and a reduction in exports of other tradeables, non-tradeables being unaffected. Or second, the increase in income may lead to an increase in demand for domestic non-traded goods and a consequent increase their prices.

Having given the above definitions, let me now move onto why the concepts matter. In the construction phase of the LNG project, real exchange rate appreciation is likely under all three Government fiscal scenarios- conservative, aggressive and passive spending. Then in the production phase, the study by BPNG and Monash shows that real exchange rate appreciation will be more pronounced under the aggressive spending (over spending) and passive (spend all as you get it) scenarios than under a careful conservative spending approach. Real exchange rate and inflationary pressures will be significantly lower under the conservative spending approach. So the effects of Dutch Disease can be mitigated by careful and prioritized Government budget expenditure. Thus, the importance of the Sovereign Wealth Fund (SWF). The decision by the Government to establish an SWF is therefore welcomed.

### *Sectoral Implications of the LNG Project*

Construction, manufacturing, transportation, service oriented industries and commerce (wholesale and retail) sectors will benefit directly or indirectly in the short run through the provision of inputs during the construction phase. Then in the operational phase, sectors such as manufacturing will face considerable competition from imports and will be harmed by the appreciation of the real exchange rate. Traditional agriculture (food, fruits

and vegetable) sub-sector will fare well under increased aggregate income and demand.

The export agriculture sector (coffee, cocoa, palm oil, copra, forestry) will be harmed by the real appreciation (*Dutch Disease*). Our exports will be less competitive and so there will be a decline in the export of these commodities. This adverse effect can be more pronounced under the aggressive Government spending scenario because excessive Government spending will add to the real exchange rate appreciation through increased liquidity and high inflation. This adverse effect can be mitigated or minimised through the conservative Government expenditure approach.

Apart from a strategic careful and prioritized spending, the Government can also mitigate the '*Dutch Disease*' effect on the tradeable agriculture sector by maintaining and reconstructing the existing road network as well as all the social sector infrastructure of health and education and law and order. This will aid the producers get their produces to buying points and sustain production and export. In other words, the resource curse scenario can be addressed through better and improved infrastructure network.

### **What Can the bank of PNG Do to Minimize or Mitigate the 'Dutch Disease' Effect to Assist the Agriculture/Forestry/Fisheries Sector?**

On its part, the Bank of PNG can mitigate or minimize the '*Dutch Disease*' effect through its management of the Kina exchange rate. While the exchange rate regime is a floating one, it can use the build-up in international reserves to support the Kina at an exchange rate that is

favourable for agricultural export growth while not completely going against the market trend, under a real exchange rate appreciation scenario. But this will be done in joint consideration of the objective of monetary policy, which is price stability. The desired outcome of having competitive prices for our agricultural exports through the Central Bank supporting the Kina at a desired exchange rate will be best achieved with the conservative fiscal expenditure approach described above, under a close coordination of monetary policy and fiscal policies.

Apart from the direct influence of exchange rate on the agriculture sector, the Bank considers macroeconomic stability as an important foundation for microeconomic development and improvement. When there is price stability- entailing stable inflation, stable exchange and stable interest rates- businesses, the general public and the international community will have confidence in the economy and economic activity can prosper. The Bank plays a major role in influencing macroeconomic conditions through its monetary policy and management of the exchange rate policy. Given a condition of macroeconomic stability, it is up to the other Government agents to do their part to improve things at the micro level.

### **Overall Macroeconomic Management**

During the construction phase of the LNG project, the Government should adhere to the parameters of its annual budgets, and prioritise its expenditure so as not to compete with the private sector on the limited resources within the country, especially in areas of construction, civil works, earthmoving and other infrastructure developments. It should instead concentrate on

maintaining existing transportation and social sector infrastructure that have deteriorated in many parts of the country, in order to improve health, education, and law and order status. The Government should increase capacity of the workforce by providing appropriate training in schools and colleges and improve the performance of implementing agencies. This would also allow for the utilization of the expertise, physical and human resources that are built up by the LNG project development, to be efficiently and productively used as and when they are released from the project.

Over the life span of the LNG project, the Government should then follow a strategic expenditure plan which relates to its medium term development plans, containing specified programs and projects that aim to improve infrastructure and bring services to the rural population. The drawing down of funds from the SWF should tie in with the annual National Budgets, which should reflect the year to year programs of the medium term plans so that it serves its purpose of enabling the Government to better manage the revenue flows- including dividends, royalties and tax from the LNG project, and expend it on priority areas in a sustainable, efficient, and productive way, that will benefit the great majority of the population and care for future generations..

All these are part of prudent macroeconomic management that will aim to (1) contain inflation rate at an acceptable or tolerable level and (2) minimise the effects of '*Dutch Disease*' on industries that will not directly benefit from the LNG project.

Prudent Macroeconomic management encompassing what the key Central Governments and the Bank can do as described above has to be accompanied by micro level initiatives and programs. This is where the National Agriculture Development Plan and other medium term development plans of the Government come in. These plans must enable the development of the traditional as well as value-adding industries.

Ladies and gentlemen, the whole approach for policy decisions at the macro and micro levels, and developmental programs and projects in areas that matter for our people, have to be done in an integrated and coordinated approach by all responsible agents in line with the Government's Vision 2050 for the country to move towards realising the Vision 2050 objectives.

Thank you.

#### References

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