

MANAGEMENT OF AGRICULTURE SECTOR IN PNG ECONOMY

Flora Carruthers¹

ABSTRACT

To ensure and achieve a sustainable economic growth on a medium to long term basis, a macro - economic framework defined as an integrated policy stance with respect to the budget, monetary management, foreign exchange reserves and prices, needs to be in place. To establish a firm foundation with a sustainable long term, broad based, economic management, the interactions between prices, wages and exchange rate are to be carefully balanced. Emphasis on the manipulation of these instruments must take into consideration any side affects that may occur.

Key words: Sustainable economic growth, macro-economic frame work, monetary management, foreign exchange reserves, economic management.

The goal of economic management is a sustainable, medium to long term economic growth. Towards this end, the Government uses a macro-economic framework defined as an integrated policy stance with respect to the budget, monetary management, foreign exchange reserves and prices.

Since independence Papua New Guinea has maintained:

- an open economy with sufficient foreign exchange reserves to promote sustainable medium term economic development;
- a stable and easily convertible currency and a perception by the public that the Government and the Bank of Papua New Guinea are committed to maintaining such a policy;
- a stable level of inflation (CPI), interest rates and exchange rates; and
- the support of international agencies and prospective donors.

The main impediments to a sustainable medium to long term economic developments are:

- a very high cost structure that impedes the international competitiveness of the formal non-mineral sector;

- a regulatory system that complicates and discourages private sector investment in the non-mineral sector;
- a large public sector, which allocates a disproportionate amount of resources to low priority administrative services, and
- a low level of expenditure on education, health, physical infrastructure and economic development, and a lack of commitment to systematically redirect public expenditure to these priority areas.

To establish a firm foundation on which a sustainable long term, broad based, economic development plan could be based and progress towards achieving the ultimate goal of economic policy and management sustained broad based growth for the continuous increase in the stand of living for the majority of the population, parliament last week approved an emergency package of economic measures to correct an imbalance in the macro-economic framework resulting from divergent growth rates between revenue and expenditure in the past five (5) years. Expenditures, especially re-current expenditures continuously exceeded the Appropriation Bill, resulting in an accumulated excess expenditure for the last five (5) years of K415 million, 7.0 percent of the total grown by K606.9 million since 1989, and increase of 66.4 percent at an average growth per annum of 10.7 percent. Most of the growth in expenditure was on current activities and it cannot be anticipated that such outlays will increase the future

¹ Executive Manager, Economics Department, Bank of Papua New Guinea, P.O. Box 121, Port Moresby, Papua New Guinea.

productive capacity of the economy.

During the 1989 to 1993 period Government revenue fell short of the Budget estimates by K225.1 million, an average annual shortfall of 4.2 percent. During the same period, total revenue grew by 45.2 percent, an annual rate of growth of 7.7 percent.

The result of the over expenditure and the under-estimation of revenue was a substantial deficit of K768 million, of which only K306 million was planned at the time the respective budgets were presented. K461 million of the aggregate deficit was unplanned; all of which were financed domestically.

The domestic financing needs of the Government of around K800 million in the last five (5) years represented vast injections of liquidity into the domestic monetary system, and put a burden on monetary management to ensure the stability of the economic and financial environment, prices, interest rates and exchange rates.

The emphasis put on monetary management to correct uncontrolled fiscal stance constrains the instrument for macro-economic management.

In 1993, there was an actual inflow of K260 million into the MRSF. There is no doubt that this inflow into the MRSF in 1993 could have and should have been used to reverse the expansionary fiscal stance of the Government in the previous four (4) years, and re-establish a macro-economic framework which was sustainable in the long term and conducive to the development of areas such as agriculture.

There is also no doubt that the most pressing and immediate problem the country faces is productive employment and income generation for the growing labour force, the unemployed in the urban centres, and the underemployed in the rural areas.

It is estimated that over the next fifteen (15) years the number of new entrants into the actual labour force will be around 52,000 per annum. Assuming that in the short to medium term a major structural change in the formal and informal sectors does not occur, but that the formal sector expands at a rate that will maintain its relative share of employment. Every year 10,000 new entrants will have to be absorbed into the formal sector and 42,000 will have to find productive employment in the informal sectors. This is a mammoth task given that formal

sector employment growth has been stagnant since independence.

Papua New Guinea's structural weaknesses require a two-tier approach of the development agenda. In the short to medium term, the emphasis should be on a concerted effort to overcome the structural weaknesses, while continuing to utilise existing establishments and enterprises to enhance growth in activity in the non-mining private sector. In the long term, the removal of some of the existing weaknesses will allow the introduction of more diverse industrial activities and a substantial increase in local participation to support a more equitable distribution of income and accumulation of wealth among the population, **the main source of which is land**. For the foreseeable future, agricultural development will provide the most promising opportunities for productive employment and income generation. The country has abundant fertile land, excellent climatic conditions, and vast forestry and fisheries resources. Village and smallholder agriculture and forestry and fisheries development can support a steady increase in the standard of living of the more than 80 percent of the population who live in the rural areas and can absorb most of the new entrants to the labour force. But this will require a large investment in physical infrastructure, to improve access to markets and social services, thus making village life more attractive to the better educated in the labour force. It will also require a large investment in intensive cultivation systems that offer higher incomes and job satisfaction. I will just note here that the existing landownership and tenure system, that secures to some extent an equitable distribution of income and wealth, has posed difficulties for the utilisation of land for community use and economic development.

The contribution to GDP of the agriculture, forestry and fisheries sector is around 30 percent. It provides productive employment and income opportunities for 980,000 people, 84 percent of the labour force, of which around 40,000 are in the formal and 940,000 in the informal labour sectors.

In the short to medium term the *only* solution to the problem of generating broad based economic growth that benefits the great majority of the population is an increase in activity in this sector. In the long term, a better educated, more efficient and skilled labour force, and an overall reduction in the cost per unit of production will improve the country's international competitiveness and enable the introduction of medium income industries, (e.g. inten-

duction of medium income industries, (e.g. intensive agricultural cultivation, manufacturing and tourism) which will secure long term broad based economic growth.

The agriculture sub-sector is comprised of subsistence farming, food production for the domestic market, and cash crop production for export. The first two (2) activities have consistently increased in recent years while the third has declined since 1989 when world market prices fell to their lowest real values in three (3) decades. In the short to medium term, it cannot be expected that a major structural change in the agricultural sector will occur, although in the long term a move toward specialisation, intensive cultivation and full integration into the market economy is anticipated.

Restructuring the agricultural sector to a market based cash system poses major challenges in developing the physical infrastructure to provide access to markets, packing, storing, transportation and marketing facilities; providing education and training in methods of land development, cultivation and harvesting; undertaking research to identify suitable crops and eliminate pests and diseases, and maintaining land fertility and preserving the output per unit of land through inter-planting to maximise land utilisation and the financial benefit to the farmer.

The restructuring of rural PNG into a market cash oriented sector will require a large investment by the Government, far beyond the presently expected resources from the mineral sector and the grant and loan commitments by donors. It is for this reason, that we recommend that all available Government resources be applied to the rural sector in the priority areas of education, health, physical infrastructure, and research and extension.

Cash crop production for export has been the focus of attention in the agricultural development. There are (four) 4 main export cash crops, coffee, cocoa, oil palm and copra together with some minor crops, including tea, rubber and spices. As a result of the continuous decline in the world market prices of the four (4) major export crops from the mid-1980s, the exhaustion of the financial resources of the Commodity Stabilisation Funds and the consequent deterioration in producer incomes, the future of the agricultural sector looked bleak. In 1989, the National Executive Council (NEC) established the Commodity Working Group (CWG) with the objective of conducting a thorough appraisal of the industries affected. The CWG submitted recommendations to NEC with respect to long term plans

for each industry. Based on its detailed reports and recommendations, NEC approved the establishment of several support schemes, which were designed to secure the survival of a typical efficient producer. The schemes consist of the following elements:

- a support price was fixed at a level which, at the time the scheme was introduced, would ensure that an efficient small or large holder could continue operating;
- a three (3) to five (5) year adjustment period during which the support price would gradually decline to prevailing world market prices;
- the support would be in the form of an interest free loan, to be repaid from levies imposed on growers when world market prices exceed the threshold price;
- to enable the industries to increase their efficiency and productivity, the Government would carry a higher share of the cost of research and extension in periods of low prices;
- a reduction in the debt service burden through the restructuring of agricultural development loans to longer maturities of eight (8) to twelve (12) years and a lowering of the average interest rate to 8 percent;
- the establishment of three (3) Industry Corporations, for Coffee, Oil Palm, Cocoa and Coconut, which replaced the Commodity Boards and be responsible for regulating the industries, developing research and extension services, and operating the respective Stabilisation Funds. The organisational structure of the industries will have to take into consideration the cost structure of the growers and their competitiveness in the world market. Wherever feasible, the structure should be modelled on the smallholder village grower.

A scheme with the above features was designed for the cocoa industry in 1989. It served as a model and after necessary modifications, similar Schemes were introduced for copra, oil palm and coffee.

However, in November 1992, the downward adjustment programme was replaced with a

programme of guaranteed fixed prices for five (5) years from 1992 to 1997.

To complement the price support schemes, an interest rate subsidy scheme was introduced in March 1991. All existing and new loans for agricultural and livestock development for clearing and planting, drainage and any other capital project which improves the long term productive capacity of the property, were eligible for the subsidy. The scheme was abolished in 1993 in anticipation of a decline in interest rates and in view of the increase in the guaranteed price support for five (5) years.

The concept of diversifying the agricultural sector and introducing new export cash crops and food production may be a solution for the longer term. If such a process begins immediately, it will take three (3) to five (5) years for the first harvests to generate income. In the short to medium term, the solution is to expand production of existing crops, and increase existing know-how and expertise. The range of crops produced is already substantial, some of them such as rubber, potatoes, onions, tea, spices and temperate climate vegetables are at present produced on a very small scale and have great potential for growth. Combined with the major cash crops, tropical and staple foods, vegetables and livestock, should provide a significant source of employment and income generation in the short to medium term and a solid foundation for a more diversified agricultural base in the medium to long term.

However, diversification should only be considered if there is comparative advantage.

The international competitiveness of a country is influenced to a great extent by the interaction of prices, wages and exchange rate. A small open economy such as Papua New Guinea has no impact on the price of its internationally traded goods where it is a "price taker". Therefore, it has to accept the "terms of trade" (the relative change between the export and import prices) dictated to it by the world market. The country is dependent on international trade, with the real value of imports and exports of goods and services amounting to 60 percent.

There is a clear trade off between prices, wages and the exchange rate, in respect to the international competitiveness of a country. To achieve an increase in competitiveness there must be "a real devaluation of the country's currency in relation to its competitors". In principle this means that the

cost structure must increase at a lower rate than that of its competitors. In a small open economy such as Papua New Guinea, with a high propensity to import, imported inflation will have a major impact on domestic inflation. Therefore in the long term it is not possible to maintain a lower level of inflation than our competitors. On top of this, the efficiency and productivity of capital, labour and other inputs is lower here than our competitors which have had more time to develop. This is compounded by other structural weaknesses.

In the non-mineral sector, the main variable over which the Government has some control is the price of labour. Given that the objective is to generate productive employment and income opportunities for the growing labour force, the unemployed and underemployed, the best method of achieving a reduction in the cost structure is through a real decline in salaries and wages. This process could be enhanced by a downward adjustment to the exchange rate but this could fuel an increase in inflation. The less salaries and wages are indexed to prices to lower the impact of a devaluation on inflation and real decline in salaries and wages. In addition, a downward adjustment in the exchange rate will increase both the local currency price of exports and the price of importing locally produced goods. This will encourage domestic production of traded goods by increasing production for export and import substitution.

In respect to the analysis of prices, wages and the exchange rate, one should consider three (3) distinct economic sectors, mineral, Government and the non-mining private sector.

The mineral sector remains largely unaffected by changes in domestic prices, wages and the exchange rate. Mineral developments are capital intensive, their success or failure is largely dependent on world market conditions and they are only marginally effected by domestic prices and wages. All mineral projects in Papua New Guinea are offshore funded and they service their capital (Debt and Equity) from export proceeds, therefore changes to the exchange rate will have little effect on them.

The mineral sector generates a large foreign exchange surplus, estimated at K434 million in 1992. The effect of changes in domestic prices and wages on profitability is marginal. Any downward adjustment to the exchange rate will bring a net benefit to this sector.

The Government sector produces a large foreign exchange surplus estimated at K245 million. The surplus is expected to increase substantially in future. Most of the Government expenditure is on domestic inputs, such as salaries and wages and local contractors and suppliers. Estimates indicate that the government sector will realise a net gain from any meaningful real devaluation. This gain could be productively utilised to increase the supply of goods and services to the public. However, by itself it does not provide an adequate reason for a downward adjustment to the exchange rate.

The public sector will be better off if a real devaluation can be achieved through a trade off between prices and salaries and wages. Government revenue is highly correlated with wages.

The non-mining private sector produces a large foreign exchange deficit, estimated at K646 million in 1992. The deficit is unevenly distributed between the sectors and sub-sectors. The information required to fully assess, evaluate and measure the sectoral distribution of this deficit is not available. Estimates indicate that the deficit is largely generated by the formal non agricultural sector, while the formal and informal agricultural sector produce a small or no deficit.

In the agriculture, forestry and fisheries subsector, the relatively small formal largeholder sub-sector will generate a substantial foreign exchange surplus, estimated at around K50 million. This sub-sector would be the main beneficiary from a downward adjustment in the exchange rate. The small size of this sector which represents around 4.2 percent of total GDP, constraints its potential for expansion in the short to medium term. The high cost structure, land ownership and acquisition, and other structural weaknesses would limit the increase in the production and the economy wide gains that would be realised from the use of the exchange rate to achieve a real devaluation.

The smallholder, village grower's sub-sector seems to have a small deficit in respect to foreign exchange related consumption flows. The sub-sector has a great potential to increase its production of cash crops for export and to increase food production for domestic consumption and import substitution. This would more than compensate for any increase in the cost of production and increase in the purchase price of goods and services for consumption. The sub-sector uses few imported inputs, cultivation is by self or family employment, indebtedness to the formal financial

system is close to zero, and the propensity to consume imported and formal sector supplied products is relatively low. Food, shelter and clothing are self produced to a great extent. This sub-sector will only benefit from a real devaluation in the form of a downward adjustment to the exchange rate. A trade off between prices and salaries and wages will at best produce a small gain or have a neutral impact.

Considering the economy as a whole it is clear that only an adjustment to the exchange rate that will result in a real increase in economic activity in the informal agricultural sub-sector can compensate for losses in the urban formal sector. Therefore, to justify a downward adjustment to the exchange rate from an economy wide point of view, the following conditions have to prevail in the informal agricultural sub-sector.

- the supply response in the informal agricultural sub-sector, through an increase in the production of cash crops for export and food for domestic consumption and import substitution, has to be greater than the impact of the increased kina cost of imports to the economy.
- the distribution of the existing deficit and the supply response in the informal agricultural sub-sector must enable the great majority of the population to fairly compensate themselves for the losses incurred; and
- the increase in the kina value of the export price of agricultural commodities must be passed on to the smallholder, village growers. At present, part of the problem is that the intermediaries, buyers, processors and exporters are the main beneficiaries of increased prices.

At this stage of our development it is unlikely that a sufficient supply response from the informal agricultural sub-sector can be assured. However, if the rural development agenda presented in this brief is adopted then in the medium term an adequate supply response may result from an adjustment to the exchange rate.

At this time, the exchange rate does not therefore appear to be the most effective instrument to achieve the Government's main economic objectives: sustainable medium term broad based economic growth that will benefit the great majority of the population, and the provision of productive employment and income generating opportunities

in the rural sector.

For the foreseeable future, the only objective of a real devaluation should be to increase the international competitiveness of the traded goods sector. The analysis of the present structure of the economy shows that in the short term the most appropriate instrument to achieve a real devaluation is a trade off between prices and salaries and wages. Only if there is a substantive supply response from the smallholder, village growers should be the focus of all commodity support schemes, as well as rural development plan by the Government.

Until such time that the economy's structural weaknesses are remedied the only way to substantially improve the welfare of the population is the development of agricultural and agro-based export oriented industries that can compete on the world market. All instruments available to economic policy makers should be used to achieve this objective. The exchange rate is one of many instruments that can be used and all of them should be considered on the basis of their effectiveness in achieving set objectives while taking into account any side effects they might have.