



**CPA Annual Conference, Lae, August 2012**

**Address by Paul Barker, INA**

## **Innovation, Opportunity and Entrepreneurship**

It's said that 'necessity is the mother of invention' and that great artistic drive and inspiration comes out of need and discomfort, whilst 'plenty' encourages indolence and sloth. Certainly, when situations become desperate, breakdowns or shortages occur or fuel prices go through the roof, new technologies, substitutes or ways of doing things are hurriedly rolled out; whereas, for example, as soon as the famous Finnish composer, Sibelius, was granted a State award to create great works of music, he perhaps became too comfortable and never produced a further note, and certainly not the great tome expected! That may run against the argument presented by many affluent executives that 'you pay peanuts and you get monkeys!' or that you need to pay (over the top) for performance. (That raises many questions over what is genuine performance, as opposed to the bonuses paid, for example to bankers, even when profits are slashed!)

The two concepts, of course, are not contradictory. In life you have a limited amount of time to allocate to work and leisure activities, and clearly, if and when you've met your essential survival needs for yourself and your family, there's a payoff between the choices, usually with diminishing marginal returns to that extra effort; in other words, you may be prepared to work for a modest amount for initial extra effort, but once already earning a good income, you may value recreation more than money, and require a markedly higher income (or other reward, such as fame, or reciprocity) to increase effort further.

If you have an empty belly and all conditions are set against you, you will need to both struggle and be innovative to survive, but you'd normally need more favourable, or at least less adverse conditions to be able to break free of poverty; hence, on the Indian sub-continent they've generally found that microfinance schemes, or social cash transfer schemes, have been effective at keeping people out of extreme poverty but alone provide inadequate opportunity to raise people out of poverty or to provide the stepping stone for greater entrepreneurial prowess .

You need both opportunity and incentive to achieve better for yourself, for example in the way that millions of rural Chinese who've moved to cities strive to make a break for themselves and their families for a better future; some succeed, whilst others are sucked back down, by adverse conditions, perhaps just bad-luck or illness. By contrast, if life is already comfortable and there seem few incentives or opportunities, then there may be little motivation for being innovative or entrepreneurial, whether for some in a rural PNG village or even as the comfortable offspring of highly driven and now wealthy first generation urban dwellers.

So what is innovation? Innovation is usually defined as developing a practical idea or technology, which can embrace some invention, but also a new approach to delivery or adaptation or refinement of some existing technology. Papua New Guinea is largely an agricultural-based society, even now when around a fifth of its GDP derives from mining and hydrocarbons, rising to perhaps a quarter by 2015. Perhaps some 10,000 years ago PNG hunters and gatherers made a major innovation, planting and cultivating, rather than just foraging for wild crops. Since then PNG has become one of the major sources and dispersion centres for literally hundreds of varieties and cultivars of different cultivated food, medicinal and other functional and decorative plant species, selected by innovative farmers across the country, with a wide range of farming systems adopted and adapted for different environments.

More recently, with new opportunities, crops and markets available PNG farmers readily adopted a range of cash crops, and modified farming systems to incorporate a range of both subsistence, traditional and new cash crops.

Agricultural, as with other, innovation is sometimes differentiated between products and processes, with new crops, like the introduction of a coffee or oil palm, or perhaps more recently some new spices, jatropha, or a new food crop hybrid, for example, comprising the new products, and new inputs or manner of production comprising the new processes.

For a long time governments have tried to stimulate innovation, with the idea of generating wider adoption of new practices geared to increasing output and the economy and employment. In colonial times in PNG and the South Pacific the old colonial governments recognised the high cost of maintaining an administration in remote islands, and sought some income from settlers and plantations, but also from the locals, so as well as engaging them, voluntarily or involuntarily in nearby or remote plantations, they also figured that the imposition of a tax in itself would force local households out of what was perceived as too comfortable a lifestyle and into some form of change.

Although particularly the Tolais had dynamic sales of copra and coconuts going back to the late 19<sup>th</sup> C, and extensive bank accounts and even some vehicle ownership before WW2, it wasn't until after the war that smallholder agricultural production (notably coffee and cocoa) was encouraged by the colonial government entailing extension and technology transfer and planting material from the

estates. PNG farmers, particularly in some regions, took to it like ducks to water, largely on a smallholder rather than estate basis, integrating new crops, processing and marketing into modified traditional agricultural systems. Indeed, when under international agreements, the government was required to restrain extra coffee production in the 1960/70s, farmers just proceeded to expand their plantings regardless. By the early 1980s, when agricultural exports still exceeded mineral exports, smallholder producers had become dominant in most crops, with estate production stagnant or even in decline, other than in some dynamic and more heavily capitalised industries like oil palm.

There is some literature on the early PNG entrepreneurs, notably the Tolais (e.g. by Scarlett Epstein), with their move from traditional but relatively static affluence to a more capitalist model of accumulation still initially firmly rooted in traditional approaches to shell-money acquisition and exchange, as well as growing demand for consumer and capital goods. There is also some literature on the early Highlands entrepreneurs (e.g. B Finney), perhaps starting with the late Sir Sinake Giregire in Goroka in the later 1950s, who built their diverse business empires over the years, starting from small coffee estates, but in some cases, as with Hari Gotoha, also in Goroka, from a non-agricultural food marketing and processing base.

In looking at these early entrepreneurs there was consideration of them as somehow running western style businesses, freed from perceived burdens of the wantok system. In reality, for the most part they, and many successful PNG businesses subsequently, have explicitly drawn from the wantok system, providing capital and labour on initially favourable terms, when capital markets were largely unavailable, even if many of them had to manage their reciprocal commitments to develop their businesses, particularly in formative years.

There is also some literature on early cases of women in rural business (L. Sexton), notably under the wok meri movement, where women pooled their savings from activities like market gardening for business, but while the savings arrangements worked well, the business model was less successful, restrained by the women's multiple other demanding household tasks.

A PNG capitalist model was certainly taking hold, but initially at least, with unique PNG flavours, and, as with politics, not necessarily following the model inherited from overseas, based, for example upon Weber's forbearing protestant principles or much of the Asian population's frugality or high propensity to save.

Up until nearly Independence the foreign direct investment was the major driving force in the development of the monetised economy, but in 1972 the pre-Independence government, under Chief Minister Somare, introduced an investment policy aimed at encouraging local entrepreneurship in a range of restricted business activities (to be overseen by a National Investment and Development Authority, the precursor of a more foreign investment friendly IPA), and squeezing out foreign ownership including in lower-tech plantations, whilst continuing to welcome FDI in higher tech and more demanding enterprises, notably major enclave extractive industry projects (in mining, oil, fishing and forestry) intended to drive the country's economic self-reliance, as well as agro-nucleus enterprises, each requiring capital and prevailing capacity of locally-owned businesses.

These restricted lists were combined with mechanisms to fast track localisation of ownership, which subsequently proved problematic in some cases, as with the plantation redistribution scheme, and

more successful, initially at least, with the Stret Pasin stoas, as well as application of a range of infant industry and related protective tariffs, which have largely been whittled down over subsequent years under PNG's commitments to multilateral and bilateral trade liberalisation agreements.

Much neo-classical economics is focused upon the interaction between supply and demand for land labour and capital, and if the right market conditions prevail there'll be growth and ensuing economics opportunities will prevail, stimulating further innovation and development. The economist Joseph Schumpeter in the 1930s elevated the role of Innovation, and was the father of a growing school of thought amongst economists and management gurus, like Peter Drucker, which greater focus on innovation as an active driver of economic change and development, rather than merely a causal response to that development. Realistically, there must be a prospective demand, for some product or process, however latent, but great innovators, like Steve Jobs, are able to make a difference, providing new gadgets with an entirely new style and elegance; maybe style and choice will come eventually, but that requires the right market conditions, including a focus on a knowledge economy with strong access to information on opportunities and risks, suitable skills to analyse and apply data and information effectively using imagination and creative thinking, able not just performing by rote,

Various developing countries like Sri Lanka have long been committed to universal education and literacy, providing a crucial stepping stone to broad economic participation and development. Some, like its big neighbour, India, allowed a more elitist model of education to proceed in practice, with large portions of the population long relegated to second class rights, services and opportunities, although, their Constitution and founding fathers, emphasised a society of equitable rights and opportunity. That broad based investment in human capital, as well as infrastructure, may help account for China's greater apparent economic progress in recent decades than India, despite India's brilliance in many fields and perhaps less traumatic and controlled development process.

PNG's also has a Constitution which emphasises equitable rights and opportunities for men, women and children across the nation, whether in urban and richer provinces or remoter provinces and districts. Yet the country has failed badly to live up to that commitment and obligation, with the relatively egalitarian earlier years after Independence, where there was a major drive towards rural infrastructure and service delivery, MCH clinics and patrols, being replaced by increasing disparity between the haves and have nots, amongst provinces, districts, urban and rural areas, and a privileged elite or ....., who've been able to appropriate much of the nation's public assets and natural resources (including land under SABLs) for their own gain, in turn depriving much of the rest of the community, as there's only so much to go around.

The commitment of late to so-called 'free education' is overdue, although adding greatly to the burden on teachers and the system if it is to be converted into delivery of a quality education system, extending into appropriate tertiary, technical and vocational knowledge and skills development. Great innovators like Steve Jobs may be able to do without all the tertiary education, but for most suitable education is not a luxury. Maybe great innovation and entrepreneurship is something that's innate, not learnt, without access to information and understanding how to use information that talent is likely to be severely handicapped. The rural areas of PNG and much of the world's developed countries is scattered with Einsteins and Warren Buffets if given the right opportunities (as well as Olympic champions).

What's the issue here? After some decades of negligible, erratically fluctuating growth, which was certainly trailing behind population growth, PNG has just enjoyed a decade of positive economic growth equal or exceeding (likely) population growth and during most years since 2006 growing robustly. There was much ground to make up and by last year it was estimated that per capita income was no greater than at Independence in 1975, and with much greater income disparities now, that would still leave much of the population worse off.

Nevertheless, for much of the past decade the growth has been driven by strong commodity prices and economic activity in non-mining as well as mining and hydrocarbon production and related construction, and showed a strong boost in employment, particularly in some fields, notably fields required latterly for LNG construction, for which this month – August – is the peak month, before staff and contractors are progressively laid off.

The question is, will this growth be sustainable and how much of the population will it embrace? It's been calculated by Datt and Walker (2006) that for every 1% consumed in the mining sector there's only a 0.1% reduction in poverty, whilst every 1% consumed in the non-mining sector results in 0.9% reduction. Although recent data isn't available, with neither the 2008 HIES nor the 2011 Census outcomes available, previous data found that unlike virtually everywhere in the Asia Pacific region where poverty declined constantly from 1990 to 2003, in PNG it went the other way, and that levels of inequality (relatively low at independence) had risen to be amongst the highest in the Asia-Pacific region. Again the highest levels of poverty are generally to be found in the rural areas, with lack of access to markets and basic services a major contributor, with transport infrastructure and many government services having deteriorated over past decades, particularly as funds have been increasingly diverted to administration in main centres, and distributed and managed on a very uneven and uncoordinated basis.

Despite strong urban growth in recent years, driven by various push-pull factors, PNG remains one of the most rural-based societies on earth, supposedly after Rwanda. Despite the recent massive land giveaway, under the SABL scam, most households still have access to land for subsistence and potentially more commercial cash cropping. A recent gender survey undertaken by the INA (for the WB) confirmed that access to land remains a critical factor in determining young and older men and women's sense of security. The land provides the most accessible opportunity for business activities, and even over the past decade of largely better agricultural prices, apart from oil palm with its major capital investment, there did not seem to be the expected jump in production of main cash crops, with people just enjoying the improved incomes but not boosting output. Where was the seeming cut and thrust drive of the early Highlands entrepreneurs like Sinake Giregire?

Well, for a start those readily accessible areas of land, including old expat-owned estates are already taken up, and, with cocoa there are devastating pest and diseases, notably pod-borer (or CPD) destroying whole crops and requiring a whole new farming system from the rather part-time mixed cropping which fitted so well with traditional agricultural systems.

Some wonder whether Papua New Guineans may not be so entrepreneurial, in the face of competitive imports and various overseas businessmen taking over even formerly restricted and some currently restricted economic activities. There is pressure from some quarters to reimpose various business and trade protective restrictions to assist local-owned businesses.

For a start PNG still needs FDI for major and specialist investments and new innovation. There is markedly more domestic capital now available, with landowner companies, superannuation funds and households and it would be good to see much more of that invested in innovative and productive activities within the country, rather than so much invested in such areas as Queensland real estate. Some of the lancoos have been quite entrepreneurial and diversified their businesses, with real prospects of long term and growing operations away from their core activities, although at this stage many others remain one-horse enterprises, depending on a single source of business income and little signs of have the interest of capacity to diversify or sustain themselves after the tap has dried up.

On trade PNG is now enjoying cheaper imports, helping restrain inflation and making goods and services more affordable, especially to lower income urban families on fixed or informal sector earnings. The kina has probably peaked for the time being, at least until LNG starts being produced, but its regained strength has certainly undermined incomes for rural producers, also suffering recent declines in world prices, in the face of more uncertain global economic conditions. It has also jeopardised the prospects for many of PNG's other smaller but prospective manufacturing and other value-adding and some service industries such as tourism, which should all provide the needed opportunities for small to medium PNG enterprises and to provide growing employment.

Old style increased trade restrictions aren't the answer, and result in damaging tit-for-tat, but removing the heavy handicaps that PNG businesses face is crucial to enable these businesses and businessmen, including farmers to operate and compete on a more level playing field.

Foreign or domestic investment and ownership shouldn't necessarily be the main issue. Many of PNG's longest established, most loyal and innovative businesses, which meet their commitments as corporate citizens and contribute their full taxes and often much more, are foreign-owned or part-owned. Some of them have experienced a growing PNG-shareholding over recent years, as funds have invested in successful local business.

It's unlikely that many PNG businesses will be able to compete with some of the new international retailing and associated businesses, at least whilst most of the population remains relatively comfortable on their land and value their recreation time more than many of these new investors. So long as they're operating legally, fairly and competitively, including both collecting and paying taxes including GST (which admittedly many aren't) then PNG consumers and other businesses benefit from their supplies and affordable prices.

Papua New Guineans entrepreneurial spirit and readiness to respond to price signals is constantly demonstrated, for example with the burst of vanilla output in response to a brief price boom, although it was a shame that in their eagerness some producers chose to use the equivalent of performance-enhancing drugs, in other words cheating, to the detriment to the majority of others who didn't, and for a while undermining PNG's reputation in the market.

Of course, building up a whole new entrepreneurial community of Papua New Guineans, able to take up and pursue innovations, on their own using their own resources or supported by, or in partnership with venture capitalists or other larger or specialist partners, would set the country off on the best footing, and presumably with the commitment and longer term horizon to reinvest and build up their operations within the country. This must still centre on agriculture and other land-uses

as the country's continued economic backbone and most accessible resource, and develop downstream processing and niche markets and a range of associated enterprises, marketing to both the domestic and international markets.; as with locally-owned Paradise foods trialling different chocolate-based products for combining with their other products, using a variety of PNG ingredients, including cocoa, sugar and vanilla.

For this to happen to really take off in a big way requires:

- Suitable macro-economic conditions, including a kina that is not further driven up by future extractive industry operations, and mismanagement of a prospective and unaccountable SWF
- Main and access roads and other core transport infrastructure (including water and power) are restored and maintained to supervised lasting standards, through well coordinated and particularly routine allocations and competitive tendering (including under the SWF), but without resort to extensive international borrowing (except genuine concessional); cut out middleman and direct funds, equipment and support at the District level
- Application of well-managed, modest and sustainable freight subsidies for remote locations
- Crack down on corruption which both diverts public funds, gives unfair access to schools/college places and scholarships, and which jeopardises small businesses with constant demands but poor services
- Restore effective law and order services out into the local level, including applying the 2004 police report recommendations for a start, as updated, to support a professional and accountable service. The high crime rate undermines not only urban business and lives, but also farmers incentive and other rural enterprise
- Enhance quality primary to tertiary and TVET education and health services at the local level, which is partly dependent in turn on reliable road, shipping or air services, and investment in expanded and in some cases improved/extended and teacher and nurse training/health worker training, to restore and build up services and ensure greater opportunities for young people and beneficiaries from adult programmes, both from using their land and other resources, but also for those increasingly marginalised and needing to depend upon education for further opportunities
- Encourage competition (for long term growth and development) and opening up various markets to ensure reliable and more affordable ICT, including for use of internet/advanced mobile phone use for access to information on markets and new innovations, mobile services, including mobile banking, as well as extending distance learning, and marketing purposes
- Promoting financial literacy right in school level and availability of a range of competitive micro-finance products for different needs, and other financial services for SMEs, which are graduating to larger ventures.
- Encourage partnerships, on nucleus-type (but also well formulated cooperative) lines, enabling small business men and women to access technology, planting material or other inputs, and marketing support, (as with the PPAP etc)
- Clean up land administration, both to halt dishing out customary land to outside parties (thereby creating uncertainty and undermining longer term village-owned development and

genuine partnerships) but also to provide greater certainty and credibility in State leases, notably for projects in urban areas, and innovations

- Ensure effective support mechanisms for innovation and entrepreneurship, in agricultural production and processing, eco-tourism and other fields, including through effective farmer-focused research and information services, impartially administered innovative grants schemes and a range of services, competitions and awareness to promote men's and women's business achievements and encourage a suitable atmosphere for inclusive small to medium enterprise
- maintain and enhance routine dialogue between the business sector and national and local government, notably through CIMC, NWG and other mechanisms

There are many factors undermining incentives for innovation and entrepreneurship in PNG, including factors such as the demands of the wantok system, although the latter can also provide corporative support for launching major business initiatives. At the end of there needs to be an adequate perceive return from the potentially risky investment of time and capital, otherwise people will logically value their leisure time more than that extra effort to gain greater yield or gain extra financial returns.

It must be acknowledged that some communities within PNG seem to have adopted more entrepreneur stances, which appears to have been sustained and adapted partly pre-contact systems of trade, reciprocity and accumulation, in parts of the Highlands, associated for example with the pig-exchange and mokas, amongst the Tolai and their shell-money traditions, and amongst the trading partners of Milne Bay participating in the extensive kula trade.

The aim should be for a much more inclusive growth process than experienced over the past decade, driven by thousands of innovators and entrepreneurs putting their ideas into practice, from billum-wear and other fashions using local materials and styles, to niche coffee, chocolate, to RSPO oil palm and innovative power generation schemes (e.g. using methane) and to eco-lodges by remote Lake Murray or dive and surf facilities, to flower decoration and a growing range of informal economic to adapt to new technologies, and opportunities, including those home developed or adapted from overseas by an increasingly connected and globalised PNG community.

In the same way that the Bank of PNG is eager to include financial literacy in schools, (years after the banks gave up providing passbooks and giving some training around the country in high schools) there is a strong need for extensive business training in technical and vocational schools and informal education, not just for business classes.

So often skilled farmers, plumbers and other small businesses, some of whom may also be quite innovative, might be unable to progress from inadequate bookkeeping and business skills, but who should provide them? Certainly teachers, but also specialist NGOs like FORD, which need to be better supported, but teachers and public servants and even NGO staff don't necessarily make the best teachers of business and entrepreneurship; there is a need to build up a core capacity, tapping into voluntary efforts of present and retired businessmen and women from PNG and overseas (including as volunteers) supporting groups like women in Business and the Indigenous Business Council, but also with active input from established professional bodies, like CPA, and the Business Council of PNG and the Chambers of Commerce.



And yes, whilst ensuring that the economy remains open in principle for trade and investment, there are solid grounds for some favourable treatment for local enterprises, with restrictions applied on access for various micro-enterprises as well as the range of support envisaged in the new Informal policy (including provision of better marketing facilities), as applied in most countries, but this does require that the authorities and wider community do not bend the rules for special favours, and that the tax, customs and labour offices, in particular, are adequately resourced and transparent, to ensure that PNG's laws are applied universally, both for the State to gain its revenue, but also ensure a level playing field for business.

The recent Pacific Festival of Arts in Honiara showed the incredible originality, diversity and vitality of contemporary art in PNG; this was widely observed by those attending and PNG's artists are really making their mark internationally, as you'd expect they would. PNG's innovativeness in art, design, agricultural and other products come together, but with PNG's still generally high production costs for many products generally favour niche markets, paying premium prices, whether in RSPO sustainable oil palm, coffee, chocolate, tourism or other products and services, and using PNG's uniqueness and artistic talent in helping promote internationally.

August 2012

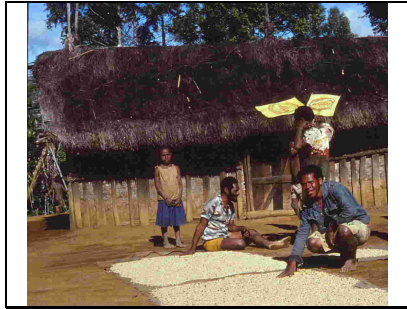
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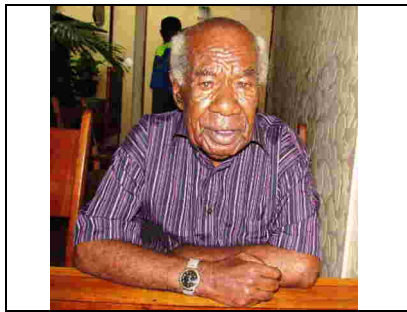
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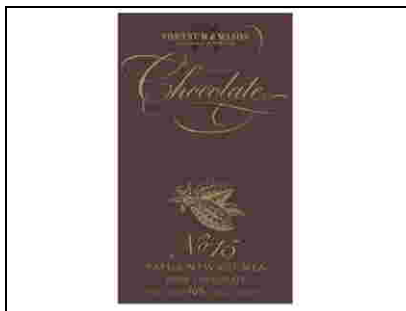
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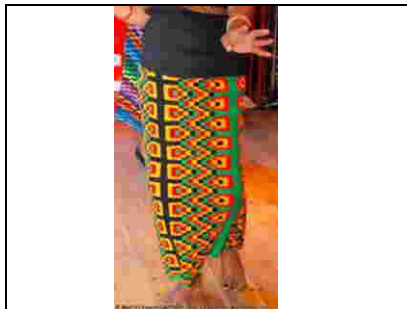
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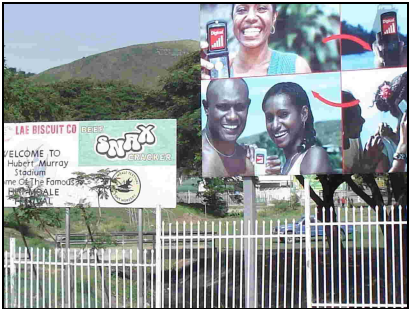
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Slide 25



Slide 26



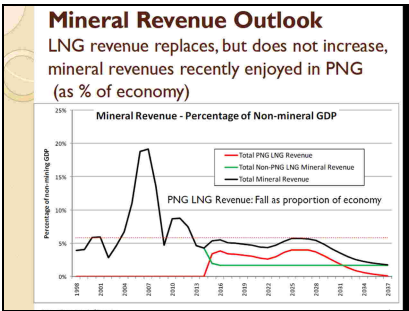
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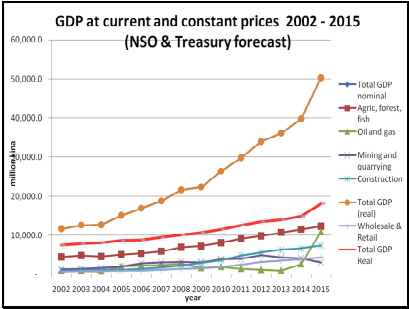
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NBPOL				
RSPO accreditation Top 10 Certified Sustainable Producers, ranked by area (at Year end 2011)				
Company/Group	Country of Origin	Production Area (ha)	Annual Production	
Capacity (MT)				
Sime Darby Plantation Sdn Bhd	Malaysia	352,564	2,013,207	
IOI Group	Malaysia	73,802	496,505	
New Britain Palm Oil Ltd	PNG/SOL Islands	71,444	415,808	
Wilmar-PPB Oil Palms Berhad	Singapore	58,252		371,230
Kuala Lumpur Kepong Berhad	Malaysia	51,904	359,689	
SIPEF Group	Belgium	50,192	287,056	
Wilmar International Ltd	Singapore	45,690	255,616	
PT PP London Sumatra Indonesia TBK	Indonesia	40,043	245,541	
PT Agrowiratama	Indonesia	36,575	267,915	
Agropalma S.A	Brazil	33,272	170,008	
Sub-total		4,882,575		
ALL PRODUCERS TOTAL		6,869,690		

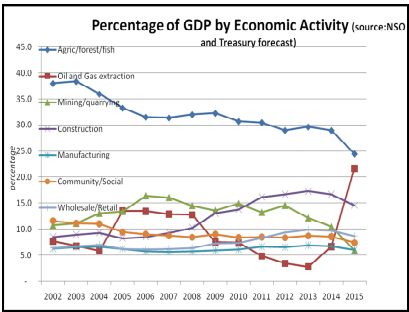
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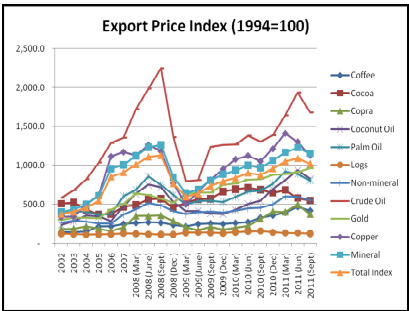
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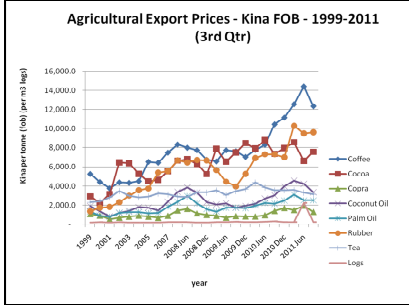
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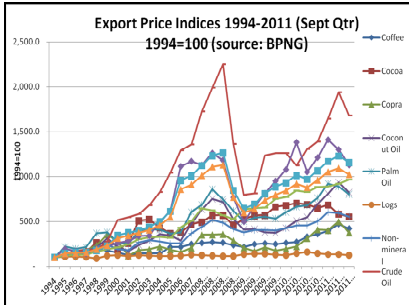
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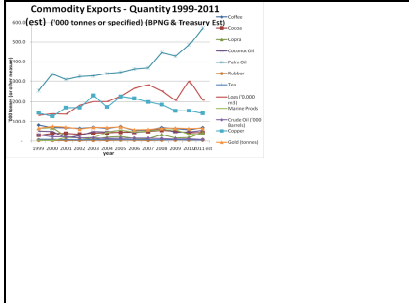
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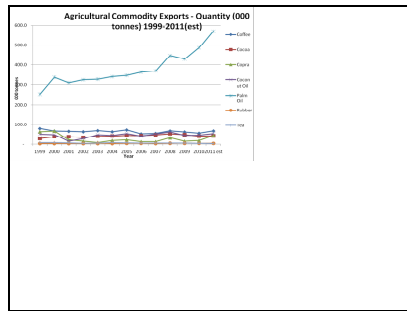
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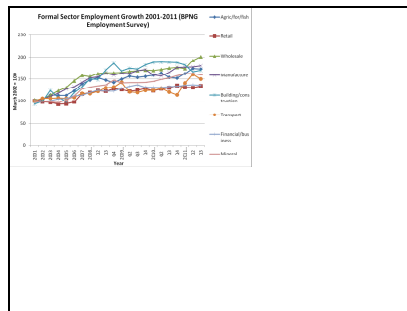
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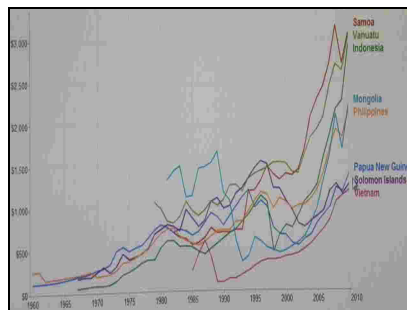
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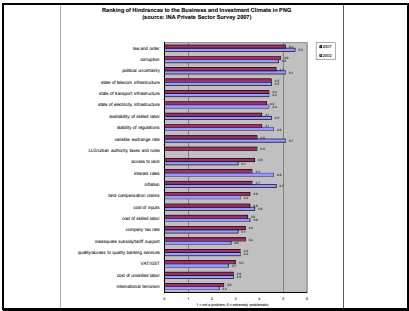
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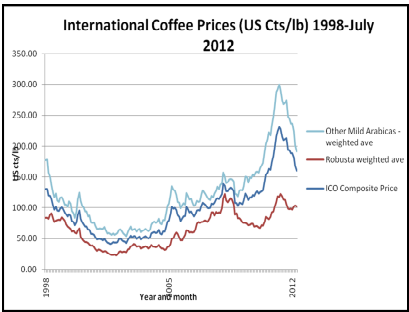
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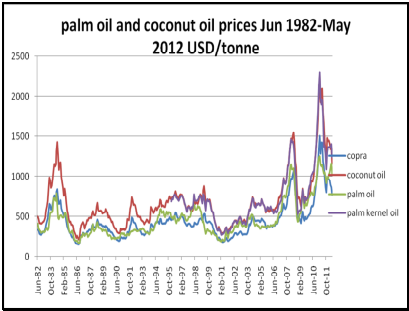
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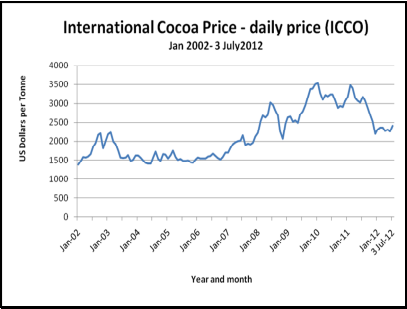
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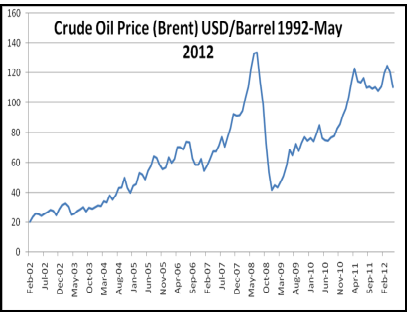
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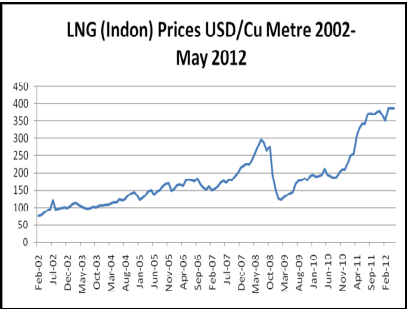
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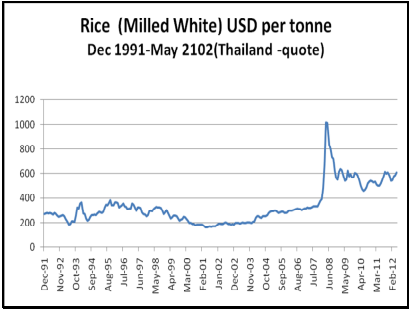
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Slide 44



Slide 45



Slide 46

