

AGRICULTURE POLICY AND STRATEGIES FOR ECONOMIC GROWTH

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INTRODUCTION

Agriculture including fisheries and forestry being renewable sectors will continue to make long term contribution to the development of PNG and its people. The issues for agriculture must be considered beyond technical horizons and biases to embrace a wider vision of encompassing both local and export market. The dominance of the sector is evident in terms of food production, foreign exchange earnings, income generation, creating market for industrial sector and continued employment opportunities for the bulk of the population.

In PNG under 20% of the population live in and around urban centre and development areas such as agro-forestry, agricultural land settlements, mines, gas, major roads projects, dam projects by ELCOM and satellite townships.

There is a definite trend of people migrating towards urban and within rural areas in search of social and economic opportunities. If this dangerous trend continues, by the year 2025 anything from 40-50% will live at those localities. This represents an immense challenge for food security, poverty alleviation, especially as the per capita food production and supply is decreasing and the proportion of undernourished people living in the rural areas increasing.

The apparent reaction of the increasing population is the development of intensive farming systems, based on high-valued crops, fruits and small livestock. These farming system have

distinct characteristics, opportunities and interactions. They have already emerged in all the major cities, towns and mining townships, project areas and over in rural areas of PNG.

The new generation of farmers have demonstrated their ability to adopt new technologies. This has been shown by the acceptance of new crops, large scale farming practices, mechanization, irrigation and use of fertilizers and pesticides. Commercial farmers of varying sizes on communal and private land have emerged under the impact of favourable market prices. Due to limited resources and various constraints, rural communities are finding it more convenient to co-operate in agricultural schemes where they realize that further fragmentation of land and other resources is not economically viable.

The government policies for agriculture is devised with the view of ensuring that agriculture remains the mainstay of the economy with adequate resource support to promote sustainable growth, and increase in rural employment. The policies recognize the limited role of the government but promote greater participation of the communities and the private sector with Government playing a catalytic role. The focus is on getting greater effectiveness in the sector through networking with stakeholders.

AGRICULTURE POLICIES

It is obvious that the agriculture sector will continue to be one of the most important sources of income and employment, and that development in this sector can empower people to sustain livelihood and reduce law and order problems. The sector's policy is to ensure the viability of agricultural production and marketing, sustain

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growth, increase income generation opportunities and improved rural standard of living.

Four areas are given high priority and represent the key elements of PNG's agriculture development programs:

- The first is the equitable delivery of quality agricultural development services, including fisheries and forestry.
- The second is to increase food security and nutritional levels of those involved in the subsistence agriculture with limited cash crop production.
- The third is the development of the export commodities, including diversification into alternative crops in order to reduce vulnerability to price fluctuations of the traditional export tree crops.
- The fourth is the development of downstream agro-processing of agricultural crops, fisheries, timber and other resources, including cottage industries.
- Improve and expand production of food crops and livestock to enhance national food security and meet local nutritional requirements.
- Encourage people in less developed areas to participate in the cash economy.
- Improve self employment opportunities among the rural people to help minimize urban drift.
- Ensure agriculture has a broader and sustainable production base.
- Encourage the private sector to play a greater role in the agricultural development.
- Ensure highest standards of agricultural research, plant and animal health and quality of produce.
- Facilitate the development of human resources of the sector so as to meet the needs of the changing economic and social environment.
- Ensure that the agriculture development is enhanced with minimum adverse environmental effects.

Goals of the Department

The Department of Agriculture as the lead agency facilitating the agricultural development has produced a "White Paper on Agriculture", which stipulates sectoral policies 1997-2001. It is currently being reviewed with industries and sectoral consultations. The DAL has pursued the following goals followed by broad policy objective and general strategies with the aim to:

- Increase the productivity and production of agricultural commodities and improve sectoral GDP contribution.
- Improve the delivery of services by restructuring of institutional arrangements including privatization and corporatization.
- Support the expansion and diversification of commodities for export and import replacement.
- Foster more balanced development of the sector in order to generate broadly based rural income and employment, reduce rural poverty, improve food security, and promote sustainable natural resource utilization.
- Give urgent attention to alleviating more serious constraints to ensure sustainable agricultural growth.

General Objectives

The Government recognizes the importance of agriculture in the economy and the potential it offers to create sustainable income and employment opportunities. Agriculture is a priority sector and the allocation of available Government resources must be increased to reflect this status. Seven principles for guiding policy directives for the period, 2000 to 2010 shall be to:

- Concentrate efforts on investment programs with high economic returns in production, exports, income and employment with minimal adverse effects on the environment.
- Create environment conducive to encourage greater private commercial sector participation, especially removing macroeconomic policies that hamper agricultural growth.
- Ensure development of human resources for them to participate productively and improve general rural welfare.
- Improve the efficiency and international competitiveness of traditional export crops by raising smallholder productivity and product quality, and by lowering production and marketing costs.
- Assist farmers in using any reasonable opportunities for efficient diversification of the agricultural production base, both for import substitution and exports.
- services in the major export tree crops industries for efficiency and release scarce Government resources to other sub-sectors.
- Revitalize research and extension services delivery systems through DAL reforms.
- Advance human resources development to avail more productive agricultural workers.
- Increase food production to attain food security and reduce dependence on imports.
- Diversify the agricultural production base through improved crop and livestock technologies, downstream processing, etc.
- Conduct applied research to develop technologies relevant to agricultural production systems and are environmental friendly in PNG.
- Improve the quality of animal and plant health through reforms to provide necessary research and inspection services.

Strategic Objectives

- Maintain a macroeconomic environment and incentive regimes that do not discriminate against agricultural growth;
- Improve the effectiveness of public institutions, programs and expenditure for agriculture;
- Foster greater private sector participation in capital investments and in the provision of agricultural support services where it is economically viable;
- Promote investments that offer opportunities for new export earnings and efficient import substitution; and
- Address the deficiencies in agricultural production, support services, delivery systems, and in the physical and economic infrastructure.
- Improve incentive programs e.g. smallholder credit, transport subsidies, agricultural taxation regimes, etc.

The Public Investment Program (PIP), with commodity project approach, has been the main vehicle DAL employs in addressing some of the constraints facing agriculture. However, effective realization of these problems depends largely on the availability of funds, skilled DAL staff, farmers and other agricultural workers and the effective linkages to be established under the new Government reforms.

Current Policies

Agricultural growth is essential for economic development and being the primary sector it has to take a leading role in economic transformation. Being the most prominent sector of the economy it will continue to provide the market for industrial and service sectors.

- Intensive agriculture offers better scope in

increasing productivity and for future expansion and sustainability of the sector. Modernizing the sector will solve some of the persistent problems hindering growth in the sector.

- Crop diversification by developing alternative cash crops like spices and condiments, fruits and nuts should be encouraged to broaden sectoral production and export base.
- Improving production and productivity both traditional and introduced food crops and livestock subsectors is an important priority area for food security and as an alternative source of cash.
- Revitalization and rehabilitation of the plantation sub-sector in order to increase production, productivity, employment, income and improve livelihood of the primary producers.
- Smallholder farming incorporating improved technology and traditional farming system will remain the main focus of sectoral policy to support commercialization of the primary production, processing and marketing.
- Appropriate policy interventions are necessary to modernize and commercialize the sector in order to activate private sector participation.
- Papua New Guinea Food Security Policy approved on 24th May 2000 by National Parliament should get necessary resource support for full implementation (2000-2010).

STRATEGY FOR AGRICULTURAL DEVELOPMENT

The need to raise the profile of women

This is one of the key issues of immediate concern facing PNG as we enter the 21st Century. Despite the multifaceted tasks that our mothers perform, their works often go unrecognised, and they lack the leverage necessary to gain access to resources, training and credit.

By directly empowering our womenfolk, they can have an impact on improving national food security and rural development.

Accelerating Agricultural and Rural Development

Improved infrastructure, increased economic activities in the cities and mining areas, increased plantation agriculture, more industrial developments etc, have been largely responsible for the rapid growth in national food production since independence; managing to keep pace with population growth. Despite this, chronic under-nutrition persists in many rural areas. Eliminating hunger will require concerted efforts in accelerating agricultural, rural agro-forestry, health and other rural development in those areas. These developments must be built on ecological principles so that the natural resource base, biological diversity and the forests, which are the ecological base for food security, must be protected for the present, as well as their future use by our children.

Land Mobilisation

Since 98% of the rural population own land, it is absolutely imperative for programmes to mobilise rural participation through farmer organization. This will overcome land tenure problems which has detrimental affect on rural development.

Land Capability Assessment

Land capabilities assessment is a very important prerequisite to a national master plan for water and land resource development including an assessment of priorities accorded to respective regions and areas within the country.

The government should encourage and facilitate the agro-ecological approach to sustained land use and land development, ensuring that any large scale land development for agriculture is based on land capability for particular land use type which is economically viable and environmentally friendly. Smallholder farm structure

and land patterns should adapt to the dual objectives of increasing food production and promote a wider distribution of benefit of agrarian progress.

Water Resource Management

Water scarcity has presented itself as a critical constraint to food production. This has become quite clear during the 1997/98 **El Nino** drought. The use of appropriate technology to improve water harvesting, conservation and management for human, livestock and agricultural use could contribute to national food security, and increase the marginal value of otherwise unproductive lands.

Reforestation

Forests and trees play a crucial role in fuel wood, and indirectly they improve agricultural production, increase incomes and improve access to food. They are a veritable storehouse of biological diversity and maintain the ecological base for food security. The social and economic impacts of wholesale deforestation in the lowlands and **devegetation** of fallowed agricultural field in the highlands, and in other major project areas needs addressing. Reforestation programmes must be started in all these areas.

Aquaculture

Fish are becoming an important source of both food and income to many people in PNG. In the highland areas inland fish farming has spontaneously emerged as an economic activity. There is considerable potential to expand on aquacultural farming in order to improve food security and increase household incomes.

New Livestock

There is also considerable potential for expansion of livestock production. Livestock products contribute in a big way to household incomes. New Species and breeds of livestock such as rabbits, turkey, geese, guinea pigs, village chickens etc need to be tested.

Post Harvest Technology

After the food, the fish, and the animals are harvested, culled or slaughtered, what happens after that often determines to a large extent what price the farmer receives for his farm produce. Efficient village based processing, distribution and marketing systems can make a vital contribution to food security, national employment and improve incomes for rural families.

Furthermore, with the changing lifestyle into a dependence on cash economy, technical advances in food processing and preservation is required to process food to enter the market place and make it accessible to all at a minimum cost.

The list could go on, but the aforementioned development issues will suffice as important indicators or benchmarks that must call for a concerted effort towards developing an agricultural programme for the major project areas.

The Department of Agriculture and Livestock has revised its policy framework to foster partnership, alliance and networking in service delivery. The primary objective of the policy is to increase and diversify food production, processing, preservation and marketing in PNG in order to achieve greater self-sufficiency in food and attain higher food security at the national and household levels by the year 2010.

Legislative Review to Coordinate Sectoral Management

We are also reviewing all the legislations governing operations of sectoral agencies to bring about harmony in legislation to ensure a coordinated approach to development. The Department is already restructured and is regionally based to assist provinces and the industries that are represented here. We must deliberately enforce and enhance partnership and continue to work together on improving the extension delivery systems.

Food Security

Food Security is defined as a state of affairs where **"all people at all times have access to safe and nutritious food in sufficient quality and quantity to maintain a healthy and active life"**

National Food security includes both adequate domestic production of food (food self-sufficiency) together with the capacity to import to cover shortfalls in domestic production to meet the needs of the population. It entails issues ranging from food production, distribution and marketing, preparation, processing and storage, to population and health, education, employment and income, roles of women, environmental concerns and sustainable resource management.

The policies bring into clear focus work programmes to enhance food production and strengthen its capacity to ensure: conservation, improvement and sustainable utilization of natural resources, including land, water, fisheries and genetic resources for food and agriculture. The policies also clearly define the roles and responsibilities of all key players to strongly enforce a multi-sectoral partnership in the conduct of the National Food Security Work Program.

CHALLENGES AND CONSTRAINTS FOR FUTURE POLICIES

Major challenges facing PNG in increasing domestic food production and improving food security are decreasing/insecure world market prices for the major export crops (cocoa, coffee, rubber, palm oil), the increasing demand for food imports (cereals, beef, mutton), environmental degradation (deforestation, soil erosion) and marginalization of the rural poor. Government has identified a number of key constraints to overcoming these challenges:

- Poor transportation infrastructure system hinders market access distribution system and dissemination of new technology and market

information;

- Inadequate resource allocation to the agriculture sector: the share of national government resources to the Department of Agriculture and Livestock continues to decline, from 9.3 percent of the total national budget in 1985 to approximately 2.0 percent in 1994;
- Current public service terms and conditions are not conducive to employing and retaining high quality and experienced professional staff in rural areas;
- Low productivity and production of agriculture crops, closely related to low farmer commitment. Both are results of unstable yields, low farm management skills, insecure market incomes, a lack of farm cooperations and/or co-operative, inadequate credit schemes, and social and cultural obligations, laws and, especially, land tenure arrangements.
- Unstable yields as a consequence of increasing soil erosion, declining soil fertility, increasing disease and pest pressure as results of the extreme weather conditions and landscape, the lack of agricultural inputs and appropriate machinery (for land preparation and irrigation), partly related to unavailability of credit for the majority of farmers and the low farm management skills (in economic and technological terms).
- Poor infrastructure, high production and transport costs, lack of downstream processing and market related insufficiencies.
- Lawlessness in rural areas prevents villagers from working their gardens and also increases costs particularly for plantations, buyers and processors;
- Cultural related constraints prevent the foundation of farmer co-operative, lead to fire hazards and are the major source of land disputes.
- Farmers are not homogenous, hence specific

needs analysis is required to address the issues.

- The new organic law on Provincial and Local Level Government clearly delineates roles for national, provincial and district administrations with respect to development, co-ordination and implementation of policies and programmes. For any impact to be realised, the role of local level governments must be acknowledged as these are institutions that are able to articulate grassroots demands and make inputs into national policies.

Unfortunately, the devolution of powers to the districts and local level governments under the recent reforms have not been effective and they are not able to mobilise sufficient resources to provide services to the community.

Given the key position of the agriculture sector in PNG, we need to ensure that this sector develops on a sustainable basis, which will enable it to continue providing for an increasing population; and to reduce food imports.

These objectives can only be met by improving infrastructure to allow access to markets; expanding the production of sustainable and commercial crops and livestock through diversification and value adding; providing appropriate macro-and micro-economic policies and structures to give a practical performances to allow continued growth in the sector.

CONCLUSIONS

The Government's policy initiatives are aimed at practical ways of raising efficiency of production, making agricultural industries more competitive, and to involve our people in productive uses of their traditional lands.

Agriculture is a renewable resource and as such it can make long term contribution to reducing law and order problem. The policy and decision makers must reason beyond the technical hori-

zons and biases to embrace a wider vision of agriculture encompassing both the local and the export markets. We need to recognize that the bulk of the agricultural activity in PNG is subsistence agriculture based on traditional group land. We must accept the true food producers in PNG are women and that it is women of this Nation who need support and information if productivity is to improve.

The agriculture sector is recovering from the recent effects of the prolonged drought and the extensive frost of the 1997/98 El Nino Effect. Food supplies from food gardens are increasing rapidly as more gardens are coming into production. Tree crops production is also improving.

The agriculture sector is at the threshold of a new era. The challenges facing the sector requires a collective effort by all, to seriously address the constraints to production, delivery of essential goods and services, and the basic support that the farming community require to realize the stated sectoral goals and objectives. All stakeholders in the agriculture sector must pursue practical goals in developing agriculture. There are areas where we can never be competitive in the global market place, but there are others where we can not only compete but excel. We need to solve micro-economic issues at the village level and community level, as well as addressing the larger macro-economic issues of world trade.

The budgetary support to the agriculture sector has been declining in recent years. However the Government continues to require the DAL to support the Commodity Boards and Industry Incorporations that have been created as part of the overall sectoral reform. It is the Government's expectation that this institutions will be in the front-line to deliver essential services like research, extension information, marketing advice, pest and diseases control measures, and provisions of credit to our farmers.

Our farmers of today are much younger and better educated than before, and hence require a much higher level of technical support,

through more organized and well staffed research and extension services. Over the next six months the DAL is anticipated to be fully reorganized so that it can maintain complete monitoring of the performances of all agricultural institutions to ensure that their programmes are directed towards the Government's central objective of ensuring viability in the sector and sustained growth to increase income levels and rural standards of living.