

## DELIVERY OF AGRICULTURE SERVICES IN PNG:

# STRATEGIES AND OPTIONS TOWARDS THE NEXT DECADE - DAL VIEWS

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### ABSTRACT

*Despite the current boom in the mining and oil sector, agriculture remains and will continue to remain the backbone of PNG economy providing economic, biological and other needs of the vast majority of the population. The need to transform rural agriculture and improve their standard of living in the villages remains a challenge to successive governments. The government's political commitment to agriculture should be translated into budgetary releases that are prompt, stable and adequate. There should be a continuous upgrading and development of high level indigenous human resources with a view to generate on a sustainable basis, agricultural technology. To have a lasting impact, technological transformation of PNG agriculture must focus on small village farmers. The improvement of their living standards should remain our fundamental objective.*

**Key words:** Agriculture transformation, strategies, options, farmers, standard of living.

### INTRODUCTION

The subsistence agriculture sector, together with smallholder producers (holdings of 10 ha or less) are the dominant crop producers in PNG. The country's agricultural systems are adapted to the local environment with a mix of staple food crops, livestock and cash crops. The need for Agricultural transformation at village level has remained a challenge to successive governments. The present government having recognized the deterioration in agriculture services to the farmers realizes that for the agricultural sector to continue generating employment for the bulk of our population, the delivery of services must be greatly improved.

To meet the above mentioned concerns the government established a Committee on Delivery of Agricultural Services to debate, consider and propose recommendations as to ways of improving the delivery services. The following is the report of the committee after inside and outside deliberations extending over a period of twelve (12) months.

### STATUS OF AGRICULTURE IN PNG

Despite the current emergence of mining and oil as the major export earning sector of our economy,

the committee found it difficult to think of a time when agriculture would cease to be the backbone of PNG's economy providing for economic, biological and rural needs of some 540,000 households who constitute the majority of our population. The share of agriculture sector in the GDP has however declined from 33% in 1980 to 16% in 1990. Export earnings from this sector have declined from 35% (K350 million) in 1980 to 18% (K190 million) in 1990 and further to 11.7% in 1992. The decline in the earnings is mainly due to low commodity prices internationally which have more or less come to stay, as well as the Bougainville crisis. Actually the commodity prices have fallen by 50 - 60% since 1985. The World Bank predicts that prices will be lower still for all tree crops in 1995.

The availability of funds from the mineral and oil sector has resulted in the import of cheap subsidized agricultural products from overseas. This is making it extremely difficult to develop dairy and cattle industries. Drought, loss of soil fertility, inability to develop irrigation systems and pest and diseases are also contributing factors in the decline of agricultural production in PNG.

### POOR IMAGE OF AGRICULTURE

Agriculture though very important is frequently equated with manual labour. Scientific basis of agriculture is often not appreciated. There is

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continued diversion of resources to more glamorous projects. By providing huge salaries and benefits to the staff in certain institutions, agriculture sector has been effectively **reduced to a 2nd class profession**. Little attention is paid to agriculture and rural development. DAL budget in 1994 was cut by some six (6) million kina (24%). There is no contingency for the nation for the time when mineral and oil boom would run out.

## SECTORAL CONSTRAINTS

In addition to the above mentioned poor image, a number of constraints plague the agricultural sector. These include low productivity, grounded extension services, poor research management output, lack of high level trained manpower, poor programme management and accountability. Farm data are negligible. Market access and infrastructure are poor or missing. Farmers frequently have little or no access to credit. Information systems and services are either under developed, negligible or missing.

## GOVERNMENT POLICY

Government's vision for 1994 and beyond in wanting to affect improvements in the delivery of rural services may be summarised as follows:-

1. Increased employment opportunities with a view to decrease, if not eliminate, urban drift and minimise social crime.
2. Revitalize rural sector.
3. Increased opportunities for the establishment of rural agro-industries.
4. Cut in food import bills.
5. Food security, especially to cope with the situation when the mineral and oil boom would run out.

## DAL STRATEGY

The focus of development programmes and projects is to improve delivery of agricultural services to rural areas. The intention here is to modernize and revitalize agriculture. For this purpose the smallholder shall be the focal point of production system. Both large and smallholders

would contribute to the commercialization of agriculture. Joint projects with smallholders, industry and NGOs would be established.

As far as feasible export crop research would be transferred to semi-autonomous research institutes. Commodity specific agents would be encouraged, where possible.

Commodity Industry Corporations would carry out their own extension, research and regulatory functions. Other agencies such as the Department of Agriculture, Non-Governmental Organizations and Rural Bank would assist in these functions as appropriate.

## AGRICULTURAL SERVICES ASSISTING RURAL SECTOR

The following villages services were recognized by the committee:-

- Research
- Extension
- Human Resources Development
- Marketing
- Rural Credit
- Quarantine and Quality Control
- Information and Publication Systems and Services

The committee proposes a number of legislative, policy and institutional changes to greatly increase the effectiveness of the above services. For this purpose inter-sectoral issues such as roads linking various parts of the country, law and order require considerable improvement. Terms and conditions of professionals engaged in the providing of agricultural services need to be brought at par with those in the other sectors of the economy. This needs to be addressed with some urgency in order to motivate the staff who are currently "classed as second class professionals" in terms of their condition of services e.g. housing, salaries and fringe benefits. Steady decline in resource allocations to agriculture would have to be halted. Rural farmer organizations would be established to mobilise farmers to receive and deliver services.

## SPECIFIC SERVICES

1. **Extension** - It is quite clear that amalgamation of DPI and DAL into a single service organization for extension purposes is a must. The reports of consultants and

consultations with DPIs emphasize that DAL should not have withdrawn from the National Extension Process. The amalgamation would enable DAL to provide expertise and resources through a network of extension advisory linkages

2. **Research** - It is proposed to establish a National Agricultural Research Institute (NARI) to emphasize excellence in mission oriented research. There should be no dissipation of energy and funds in providing corporate services. NARI would carry out research into various aspects of food crops, Livestock, alternate crops and land use. Soil capabilities of each land type would also be investigated and socio-economic research carried out and close working relationship established with National Agricultural Research Council and Agriculture Research Technical Committee.
3. **Training** - It is proposed that PMTP should be merged with Mt Hagen Agricultural College which should become autonomous under its own academic council and Popondetta Agricultural College transferred to the Council of Higher Education. Farmer schools are to be revitalized and relevant staff retrained to provide tailored courses for client needs.

A Human Resources Division is to be established in DAL to cater for diverse training needs of the Agriculture Sector. An important function of this division would be to introduce higher degree in-country training programmes at M.Sc and PhD level to increase organizational effectiveness. General upgrading and further development of existing personnel through in-service and other staff training programmes would also be emphasized.

4. **Marketing** - Major tasks of the marketing unit would be to revamp DPI marketing, upgrade fresh produce markets, increase market information, introduce group marketing and disseminate marketing information, allowing private sector to carry out the physical marketing.
5. **Rural Credit** - Credit is to be inbuilt as a component of all projects and extension officers would be closely involved in the

exercise. Smallholder credit would be subsidized and credit guarantee scheme to smallholders put into operation. Crop and livestock insurance schemes would be formulated and introduced.

6. **Quarantine Services** - Efficiency and effectiveness of quarantine service is to be increased. Strict quality control is to be exercised on local products, exports and imports with the intention of working towards the ready acceptability of PNG products in the world market. It is proposed to establish a PNG quarantine and quality control authority.
7. **Information Systems and Services** - Authoritative information is currently world's most prized commodity. Information servicing, information transfer, data management and computer software information packages required by agriculturalists would be emphasized. Development, preparation, production and distribution of wide-ranging agricultural publications would be undertaken. Scientific journals, Extension periodicals and Rural newsletters would be published. It is intended to create a new information division by amalgamating scattered information units in DAL.

## INSTITUTIONAL ARRANGEMENTS

As previously indicated the focal point for agricultural development and planning must be easy access to the villages. When considering delivery of agricultural services it is important to consider the location specific approach and development plan by taking the message to the villages.

Keeping these aspects in mind the proposed institutional structure must consider the district as the planning unit to implement and deliver various services to the agricultural sector.

In order to create an institutional framework for improved delivery of services, the committee recommends that, subject to the necessary NEC and Parliamentary approvals, the Provincial DPIs be amalgamated with the Department of Agriculture and Livestock.

It is proposed that a three tier system for the delivery of services be developed, to provide back-

up support and to monitor and direct the programmes according to the national goals and plans. The three tiers would be as follows:

**District Level** - Delivery of agricultural services.

**Provincial Level** - Technical backup support services to District units.

**National Level** - Planning, management, monitoring and evaluation of delivery programmes/projects and technical support to district units and DPLs. The National Department would also regionalise its activities in order to avoid a centralisation of the activities.

The Institutional arrangements to deliver the agricultural services are more related to extension and other line functions (technical services). Services such as Research, Quarantine and other National functions are equally important to ensure delivery of appropriate services. Institutional arrangements for strengthening these services are suggested in the policy recommendations and should be considered while restructuring the DAL.

The District as a planning unit would ensure bottom up planning and therefore the prime importance would be given to the district level institutional set up.

## DEVELOPMENT OFFICES

There are about 100 districts in the country and the present strategy to deliver agricultural services would, as stated earlier, recognise the district as an unit for planning and execution of the various development plans and projects.

Success of all plans heavily depends on the participation of people and the plans and projects would focus on the needs of the people. The District Development Office would be guided by a District Development Council (DDC) which would be an advisory body without an executive function or financial authority/responsibility. The DDC is proposed to be constituted as follows:

**Chairman of DDC:** Parliamentary Member for the District.

**Members of DDC:** Smallholders' representative, Largeholders' representative, Livestock farmers, Processing and Marketing agencies and representatives of NGOs. One representative for each/

group of villages with aggregate population of more than 5000.

**Secretary of DDC:** District Development Officer of DDC. The committee shall meet at least once in a quarter to deliberate on the plan of action, focus areas for development, review the progress and incorporate any strategy to make the approaches more field and people oriented.

## PROPOSED DAL STRUCTURE

### Option 1 (Fig. 1)

In this option only six (6) directors would be stationed at DAL Headquarters. Other staff would be transferred to the regions.

### Option 2 (Fig. 2)

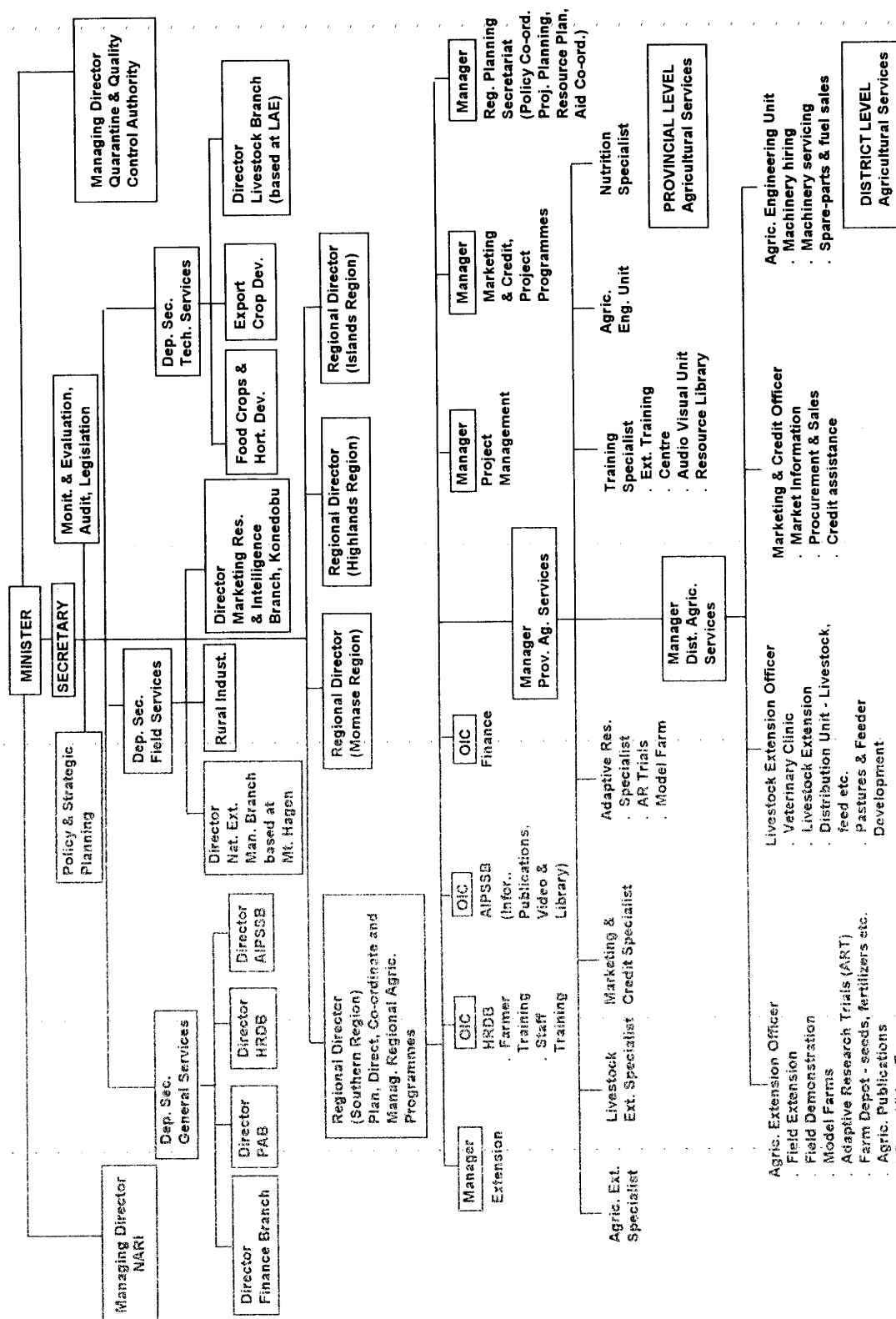
In this option some 15 directors would be stationed at DAL Headquarters. This tends to make the structure top heavy.

## LOOKING AHEAD

The excellent work done by our professionals dating back to colonial days shows that scientific effort under the right conditions can lead to high outputs of crops e.g. cocoa and coffee which have been the mainstay of PNG's economy before the current mineral boom.

But here it is essential, at the risk of repetition, to highlight some of the conditions necessary for the transformation of agriculture and these may be summarised as follows:-

1. Political commitment must be translated into budgetary releases that are prompt, stable and adequate.
2. We must continue to upgrade and develop high level indigenous human resources with a view to generate, on a sustainable basis, agricultural technology.
3. Service conditions of Agricultural Professionals must be drastically overhauled to provide them incentives to aspire for excellence in whatever they do.
4. To have a lasting impact, technological transformation of PNG Agriculture, must focus on farmers. The upliftment of their living standards must remain our fundamental objective.



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graph TD
    MINISTER --> SECRETARY
    SECRETARY --> DEPUTY_SEC[DEPUTY SEC.]
    DEPUTY_SEC --> POLICY_STRAT[Policy, Strategy]
    DEPUTY_SEC --> MONIT_EVAL[Monit. & Eval.]
    DEPUTY_SEC --> AUDIT_LEGIS[Audit, Legislation]
    
    DEPUTY_SEC --> FAS_PLANNING[FAS Planning]
    DEPUTY_SEC --> FAS_GENERAL[FAS General Services]
    DEPUTY_SEC --> FAS_FIELD[FAS Field Services]
    DEPUTY_SEC --> FAS_TECHNICAL[FAS Technical Services]
    DEPUTY_SEC --> DIR_QUALITY[Director General Quarantine & Quality Control]
    
    FAS_PLANNING --> DIR_PROJECT[Director Project & Market Reso. Planning]
    FAS_PLANNING --> DIR_FINANCE[Director Finance PAD]
    FAS_PLANNING --> DIR_HRD[Director HRD]
    FAS_PLANNING --> DIR_AIPOSS[Director AIPOSS]
    FAS_PLANNING --> DIR_EXT[Director Extension]
    FAS_PLANNING --> DIR_FOODCROPS[Director Food Crops & Hort. Dev.]
    FAS_PLANNING --> DIR_EXPORTCROP[Director Export Crop Development]
    FAS_PLANNING --> DIR_LIVESTOCKDEV[Director Livestock Dev.]
    FAS_PLANNING --> DIR_AGRICBUS[Director Agric. Bus. Advis.]
    FAS_PLANNING --> DIR_VET[Director Vet. Services]
    FAS_PLANNING --> DIR_LIVESTOCKRES[Director Livestock Resources]
    
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    DEPUTY_SEC --> RD_MOMASE[Regional Director Momase Region]
    DEPUTY_SEC --> RD_HI[Regional Director Highlands Region]
    DEPUTY_SEC --> RD_ISLANDS[Regional Director Islands Region]
    
    RD_SOUTH --> MR_RESOURCES[Manager Resources Adapt. Res. Crops & L/stock Land use]
    RD_SOUTH --> MR_HRD[Manager HRD 1. Farmer training 2. Staff training]
    RD_SOUTH --> MR_ARC[Manager Agric. Reso. Centre Info. Pub. Audio-visuals]
    RD_SOUTH --> MR_MC[Manager Marketing & Credit Proj. Prog.]
    RD_SOUTH --> OIC_FIN[OIC Finance]
    RD_SOUTH --> MR_REGVET[Manager Reg. Vet. Services]
    RD_SOUTH --> MR_REGPLANNING[Manager Reg. Planning, Secretariat Policy Co-ord., Planning, Resource Stb. and Aid Co-ordination]
    
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    MR_RESOURCES --> FE_SPECIALIST[Field Extension Specialist]
    MR_RESOURCES --> FD_SPECIALIST[Field Demonstration Specialist]
    MR_RESOURCES --> ART_SPECIALIST[Adaptive Research Trial ART Farm Depot - seeds, fertilizers etc.]
    MR_RESOURCES --> LE_OFFICER[Livestock Extension Officer Veterinary Clinic Livestock Extension Distribution Unit - livestock feed etc Pastures & Feeder Development]
    MR_RESOURCES --> MCO[Marketing & Credit Officer Market information Procurement & sales Credit assistance]
    MR_RESOURCES --> AEU[Agric. Engineering Unit Machinery hiring Spare-parts & fuel sales]
    
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