



City Mission Farm, PNG (DFAT/Flickr/CC BY 2.0)

Revamping PNG's Agriculture Department

By Michael Bourke and Brendan Jinks

Most people in Papua New Guinea (PNG) rely heavily on agriculture for subsistence food production and cash income generation. Small-scale farming underwrites the national economy, but its output and impact through contributions to informal employment and trading is neither measured accurately nor publicly recognised. A modern nation that relies so heavily on agriculture requires an active Department of Agriculture which would take leadership on

agricultural development. Its role would include advising other government departments and organisations on policies and programs; generating and publishing information, statistics and data; education and outreach programs; capacity building; and supporting preparation for and responses to natural disasters.

The Department of Agriculture has achieved a lot in the past. It was responsible for introducing potential food and export crops into PNG as well as developing successful coffee, cocoa, oil palm and fresh food sectors in the national economy[i]. Many other agricultural enterprises were also promoted with limited success, notably the production of grain crops and grain legumes.

The current Department of Agriculture and Livestock (DAL) is largely viewed as being under-resourced, and there are examples of it being bypassed by other national bodies, even on agricultural and rural matters. There appears to be a sense within the Department that it is not reaching its full potential. Highly skilled and qualified staff make the best of a difficult situation.

This is a critical time for the Department. The position of Secretary of DAL was advertised in PNG in late May 2018, and the appointment of a new Secretary presents a unique opportunity to change the direction of the Department. The government of PNG gave their vision for agricultural development in Alotau Accord II, and an opportunity exists to implement policy reforms with the leadership of a new Secretary. New and old challenges exist which require input from a national agriculture department. This includes data for climate change policy and carbon accounting. Suffering by rural villagers from natural disasters, such as droughts and earthquakes, can be mitigated when they have cash income. The most important source of cash for most villagers is from the sale of agricultural produce, and assistance from a national agricultural department is needed to facilitate this.

Here we offer some suggestions on the role a national agricultural department

should play.

Functions

Agricultural development

- Facilitate the development of innovative plant and animal enterprises, particularly for those agricultural products which are not addressed by existing agricultural bodies.
- Provide support, information, training and co-ordination to provincial divisions of primary industry, NGOs and other organisations engaged in agricultural extension.
- Develop or contribute to policies on food security, human nutrition and other priorities for agricultural development.

Advisory

- Provide advice on all aspects of agricultural production to the Minister of Agriculture, other government ministers, provincial administrations, private sector agri-businesses, NGOs, churches, and other partners and rural stakeholders engaged in agricultural development.
- Provide advice to international bodies, including the Food and Agriculture Organisation of the UN, other UN agencies, World Bank, Asian Development Bank, International Fund for Agricultural Development, and bilateral development partners.
- Collaborate with agricultural industry bodies in PNG, particularly those engaged with research and development of coffee, oil palm, cocoa, copra, fresh food, livestock, rubber and spices and with other bodies with mandates that impact on the agriculture sector, particularly quarantine and rural development financing.
- Foster greater collaborative partnerships with institutions engaged in training in agriculture and natural resources, including the University of

Technology, University of Natural Resources and Environment, University of PNG and the University of Goroka.

Information, statistics and data

- Collate, maintain and generate statistics on agricultural production and prices, including domestic food, marketed food, export cash crops, domestic animals and exported animal products. Much statistical data is currently collected by industry bodies, the Bank of PNG, Fresh Produce Development Agency and the National Statistical Office. However, the quality of data is highly variable, it is not assembled in one location and is often difficult to access.
- Maintain, update and make available information from national-level databases, including the PNG Resource Information System and Mapping Agricultural Systems of PNG databases.
- Collate, maintain and disseminate other relevant data, including that on market prospects, market development, post-harvest value-addition, land use potential, sources of planting material, climate and climate change issues. (A significant body of information on land use is held as reports by DAL and in the PNG Resource Information System).
- Contribute information on the agricultural component of carbon emissions to the Climate Change and Development Authority.
- Contribute information on the value of agricultural production, including subsistence food production and domestically-marketed food, for the annual national accounts. A major national mapping exercise in the 1990s – the Mapping Agricultural Systems of PNG (MASP) Project – provided data which facilitated the generation of these estimates. Information from the MASP database could be updated relatively easily with expert advice.
- Maintain and continually update a national agricultural library and agriculture department archives.

Education and outreach

- Make available to the public in an accessible form on-line, as well as in published form, the information and data referred to in the previous section.
- Liaise with other groups which are making data available to those engaged in rural development, including the Provincial and District Performance Information System.
- Facilitate workshops and conferences of key agricultural topics with sector specialists and leading actors and publish proceedings in hard copy and online.

Capacity building

- Train and mentor new agricultural graduates in all aspects of agricultural development, technology transfer and uptake.
- Provide training opportunities for new graduates, including attendance at international conferences and short courses.
- Compile information on relevant international best practice technologies, techniques, and approaches, and incorporate these into provincial outreach plans and programs.

Natural disasters

- Take a leadership role by providing advice to other government, non-government, international and church agencies during natural disasters, including assisting with assessments of the impact of natural disasters and relief efforts.
- In conjunction with other agricultural bodies, facilitate multiplication and distribution of certain key food crops, particularly those required in large volumes after a natural disaster, including corn (maize), sweet potato, English potato, beans, pumpkin and cassava.

Possible next steps

Current capacity and gaps in the Department should first be evaluated through a scoping study by a small and skilled project team. This process should include consultation with current senior management who are best placed to advise how current deficiencies can be addressed. Other key stakeholders in PNG, including other government departments, relevant private sector, NGOs and development partners, should also be consulted. Some clear terms of reference should be set up for the study, with adequate staffing and appropriate funding to refine or expand on the functions suggested here.

A departmental plan and framework should then be devised, including adequate budgeting. Given resource constraints, it would be necessary to establish priorities for the agreed functions.

Staffing the Department should be guided by recommendations from the scoping study but should include a broad mix and skills of senior agricultural specialists, agricultural graduates and administrative staff, including those with specialist skills in library management, archives, publications, statistics, communicating with rural communities and in using Geographic Information Systems. The physical resources needed would depend on the agreed high priority functions of a revitalised Department. They would likely include agricultural centres in major ecological zones where germplasm of key animals and plants would be maintained and propagated, as well as a well-resourced library.

[i] The current department is known as Department of Agriculture and Livestock (DAL) (1986-present). It has previously been called the Department of Agriculture (pre-Pacific War); Department of Agriculture, Stock and Fisheries (1946-1975); and Department of Primary Industry (1976-1985).

Acknowledgements: The authors thank Bob McKillop, Bryant Allen and Owen Hughes for comments on an early draft, but responsibility for content remains

with the authors.

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