DAVID K. GOUGH -- Curriculum Vitae

SUMMARY OF SKILLS AND EXPERIENCE:

David Gough has forty years experience covering the whole field of forestry and forest products, mainly in timber processing, timber seasoning, preservative application, value adding and marketing. He has skills in capacity building, institutional development and the development of strategic plans for sustainable forestry in the forestry and timber sectors. This has been based on research, and then the practical application of this knowledge, in various industry operations in Australia and in several locations in the Asia-Pacific region.

In the course of these projects he has gained experience in the preparation of timber marketing information, project proposals, design of processing plant, machinery specification, project management and participation in project teams.

David has excellent communication skills and the ability to establish rapport within the industry at all levels, from operatives to industry leaders.

His practical approach to dealing with issues and developing solutions has helped achieve success in undertaking operational reviews of plywood and timber processing enterprises, to improve productivity and profitability.

David's comprehensive knowledge of timbers of the world, as well as the various aspects of processing, application and marketability of individual species has ensured the ongoing viability of the projects he has been involved with. He has a sound appreciation of forest grower/timber processing relationships, from large-scale industrial enterprises to rural community operations designed to ensure sustainable forestry management and provide an economic base for raising living standards.

David has capacities in training at various levels for both public and private sector participants.

QUALIFICATIONS:

- B. Sc. For. (University of Queensland)
- Dip. For. (Australian Forestry School)
- Cert. Pulping and Papermaking (RMIT)
- Cert. Teaching English to Adults (Cambridge)
- Cert IV Assessment and Workplace Training.

PROFESSIONAL AFFILIATIONS

Fellow of the Institute of Foresters of Australia
Fellow of the Institute of Wood Science
Member of the Association of Consulting Foresters of Australia
Member Rural Fires Assn. of Queensland

SKILLS

- Strategic planning for development of the forestry and timber sectors from national to community levels.
- Development of forestry and forest products research programs and infrastructure.
- Reviewing the operations of plywood and timber processing enterprises to improve productivity and profitability.
- Sawmilling, seasoning and timber preservation processes.
- Appropriate utilisation and value-adding of native forest and plantation grown wood.
- Species selection for plantation establishment and forest stand improvement.
- Sustainable community forestry, timber marketing and revenue generation.
- Log to sawn timber/veneer, graded recovery studies.
- Feasibility and planning studies for sawmilling, seasoning, timber preservation and veneer and plywood operations

SIGNIFICANT PROJECT EXPERIENCE

Team Leader of a Feasibility Study for a Forestry and Timber Processing Enterprise in Western Province PNG, for the Papua New Guinea Sustainable Development Program Ltd. (PNGSDP) (three months 2004/05)

PNGSDP was set up about three years ago, having been entrusted with the 52% shareholding that BHP Billiton held in the Ok Tedi copper mine, with the express charter of starting up and providing seed funding for enterprises such as rubber, palm oil, fishing, tourism, forestry and timber.

The business model adopted in this feasibility study for a forestry and timber processing enterprise, places considerable emphasis on landowner involvement and ownership, and at the centre of the enterprise is a joint venture partner with good business management experience, capital and excellent credentials in the timber business. The project involves a sustainable cut of around 30 000 m3/an being logged, sawn and processed into value added products, and the IRR under their conditions was calculated at more than 30%.

This project is an excellent example to illustrate how successfully all team members worked to achieve an outcome which has been much appreciated by the board and staff of the PNGSDP. The board has now adopted the recommendations and commenced the first steps of implementation.

Operational and Performance Review of a large Plywood Manufacturing Enterprise in Sarawak in conjunction with Ernst & Young, Sarawak: (nine weeks 2001).

The log quality in Sarawak is reducing, logging costs are increasing and the species mix is expanding, placing additional pressures on plywood producers to reduce processing costs and adopt new work practices. The project was undertaken for a plywood producer operating seven lines, six days a week, 24 hours a day and involved running a series of nine recovery studies, to dried veneer sheet stage, on selected parcels of logs covering the current range of log quality, size class and species mix. Operational work centres were also reviewed and the study results were incorporated into a financial analysis demonstrating that if recommendations were followed, profitability could be improved by up to 50%.

Forest Sector Development in Uruguay Consultant for UNIDO: (six weeks 1999).

The rapidly expanding forestry and timber sector in Uruguay was examined in detail and issues to be addressed in order that the sector might reach its full potential were identified. Marketing, technical and institutional issues were examined and recommendations were made for their resolution. An integral part of the consultancy was the organisation and leading of a two week tour of Australian forestry by a party of industry leaders from Uruguay. The tour covered plantation management (conifers and hardwoods), processing, value added manufacturing, timber framed construction, research, marketing and the role of industry associations.

Solar Kiln Development in Uruguay Consultant for UNIDO: (two weeks 1991).
This consultancy covered the testing of a solar kiln, advice to improve its efficiency and recommendations for its improvement. Also included were recommendations for timber industry involvement in research and the use of locally grown Eucalypt timbers in the manufacture of furniture.

Timber Seasoning in Bhutan - Consultant for UNIDO: (six weeks1988).
Involved the commissioning of four steam heated timber seasoning kilns, developing a program for their operation and training local staff in timber seasoning. Recommendations were also made for the initiation of a forest products research program within the Forestry Department of Bhutan and seminars were presented to architects and engineers in both the Government and private sectors.

Review of timber seasoning operations Fiji. (three weeks!987)
Commissioned by the native forest timber industry in Fiji to, to undertake kiln testing and to design additional seasoning facilities. A timber seasoning course was also presented to personnel from industry and from the Forestry Department.

Establishment of a Forest Products Research Centre in Sabah, Malaysia. (two years1981/82)
Team leader of an FAO sponsored Forest Products Research project for the Department of Forestry in Sabah, Malaysia, to initiate a program of research. The position involved evaluation, promotion and marketing of local, lesser known species and of hardwood species being grown under plantation conditions. The promotion/marketing aspect required contact with local authorities, architects, engineers, builders and merchants. The project, based in Sandakan, had one full time international expert, four consultants, three local counterpart officers and several technical staff. The rationale for the project was to increase the level of timber processing within Sabah instead of exporting round logs. Logging in Sabah has reduced by about 50% in the 20 years since the project began, but in spite of this, local processing has increased from about 10% to 85%.

Senior Timber Utilisation Officer to Fiji Forestry Department. (three years1974/77)
Seconded under an Australian Development Assistance Program (now AusAID) for three years to help develop a research and extension function in all aspects of timber utilisation including timber preservation. In addition, a robust yet inexpensive solar kiln for use by sawmillers and furniture makers was designed, built and demonstrated.

The timber industry and Forest Products Research laboratories in Malaysia, including Sarawak, the Philippines, Papua New Guinea, New Zealand, United States, United Kingdom, Uruguay and Argentina have been visited and contacts established during study tours of the timber industries of those countries.

Australian Consultancies:

Integrating the Australian pine industry into a New Zealand wood quality research program 2003. Consultant to the Forest and Wood Products R&D Corporation to consult with representatives of the radiata pine industry in Australia and with the Chief Executive and Program Leaders of Wood Quality Initiative Ltd in New Zealand, to resolve all issues preventing the efficient integration of the Australian industry into this much respected research program.

Valuation of sawmilling and timber processing assets 2001-02. Consultant to Department of State Development Queensland, Forest and Timber Industry Task Force during the during the formulation of the Regional Forest Agreement in S.E. Queensland, a part of the rationalisation of the forest resource within Australia

Feasibility study on expansion of the business of a current veneer producer. In conjunction with State Development Queensland and Ernst and Young, investigated the options available by adding sawmilling, plywood manufacture and wood chip production, to develop an integrated operation. In the course of this study identified potential markets.

Usage and Life Cycle of Wood Products. In conjunction with Jaakko Poyry Consulting developed this pilot project commissioned by the Australian Greenhouse Office, This was one of a series of projects for the "National Carbon Accounting System", intended to assist the Government in addressing its international obligations concerning greenhouse gas emissions in Australia. A model, known as "The National Carbon Accounting Model for Wood Products in Australia" was developed. Inputs were log flows from the forests and wood flows through all of the various processing options into sawn timber, plywood, panel boards, paper, poles, sleepers, etc. Each product was assigned a life span according to its likely end use and outputs were a final figure for consumption by end use categories and a figure for the total accumulation of carbon within the existing housing stock.

MANAGERIAL EXPERIENCE

1998 to Present **Forest Industry Consultant**

1990-97. **Manager, Timber Research**, Queensland Forestry Research Institute.

Managed a team of 35, including 13 professionals and a budget exceeding $2,000,000. Timber Research activities covered processing, seasoning, strength properties, wood chemistry, timber preservation, wood pathology, wood entomology and the administration of legislation concerning timber preservation and the control of insect pests in timber. Duties included strategic planning, coordination of the research program, budget control and ensuring that a high standard and high output of research was maintained and that the transfer of results was well targeted and effective. During this time the external funding of research rose from less than 10 per cent to more than 70 per cent of the total budget. Personal research during this period covered species selection for hardwood plantations based on maximum product value. Advice was also provided on the use of 400,000m3 of fire salvage, southern pine logs placed in water storage.

1982-90. **Principal Utilisation Officer**, following return from FAO assignment in Sabah. Responsible for management of processing, seasoning and strength properties plus timber utilisation research, and wood quality/anatomical property determinations associated with the Queensland Forestry tree breeding program. Duties also included liaison with the timber and timber using industries, preparation of advisory literature and running seminars for architects and engineers in both the public and private sectors on the effective, efficient use of timber, locally produced and imported.

1978-81 & 1968-74. **Research Scientist**, Timber Research Branch. Responsible for development and management of the research and extension role in timber seasoning, timber processing and strength property determination. This expanded to include graded recovery studies in sawn timber and veneer production in local plants. A significant achievement was the initial work on high temperature drying of plantation grown conifers in Australia.

1956-67. **Assistant District Forester**, Maryborough and Dalby Districts, undertaking forest inventory, timber sales and general forest management.

Publications: Consultancy project reports and over 40 reports, conference papers and journal publications on timber seasoning (including a seasoning manual) sawmill and plywood recovery studies, general timber utilisation and species selection for plantation establishment.

Language proficiency: English – native

PROFESSIONAL APPOINTMENTS:

- Chairman of the Queensland Division of the Institute of Foresters of Australia
- Chairman of the Australasian Timber Seasoning Group.
- Member of the Timber Research and Development Council of Queensland and of the Executive of the Institute of Wood Science (Australian Branch)
- Have served on the Queensland Timber Industry Training Council, the Queensland Furniture Industry Training Council and several Australian Standards Committees.
- Member of Log Pricing Review Committees for Native Hardwoods and Cypress Pine in Queensland.
- Currently Planning and Training Officer for local volunteer bushfire brigade.
- Currently Committee Member, Queensland Division of the Institute of Foresters of Australia.