The Southern Tree Breeding Association (STBA) is a not-for-profit registered research agency formed in 1983 to manage the national tree improvement programs and associated research for plantation forestry on behalf of a consortium of private and State owned companies involved in growing trees and processing forestry products.

Research is done on a collaborative basis with a number of research agencies including but not limited to FWPA Limited, the CRC for Forestry, CSIRO, Universities, State agencies and Federal government initiatives.

The STBA specialises in tree improvement through breeding and genetics. It also provides data analysis services (with its subsidiary PlantPlan Genetics Pty Ltd) to other organisations and businesses internationally.

Comment is made against the terms of reference of the review:

A. Examine the economic and policy rationale for Commonwealth Government investment in rural R&D;

B. Examine the appropriate level of, and balance between public and private investment in rural R&D;

   A balance with investment and matching funding from the Federal government seems appropriate.

The forestry sector has been adequately resourced in the past by the State governments, Federal agencies and private companies. However, this situation is changing on an ongoing basis with the transfer of forestry assets from State governments to private ownership. The emergence and recent failures of Managed Investment Schemes is causing substantial instability in forestry RDE.

It is easy for industry to take for granted the benefits of past investment by government agencies, and be less aware of the need for sustained investment in RDE to underpin industry competitiveness. The recent failure of new forestry investment in northern Australia can be partly attributed to a lack of basic knowledge (species and silviculture) about how to grow trees in environments which are unfamiliar. It is a challenge for the forestry sector to sustain adequate levels of investment in RDE given that State governments are continuing to divest in this area. CSIRO is also reducing investment in forestry research in pursuit of other strategic objectives. There is pressure for companies to cut costs, including RDE expenditure, just to remain viable during tough economic times. Some cuts are warranted, but too much will result in lost capability and market failure.
C. Consider the effectiveness of the current RDC model in improving competitiveness and productivity in the agriculture, fisheries and forestry industries through research and development;

The current FWPA model encourages cooperative Research and Development programs across the forestry industry.

The research and development effort in forestry has been historically fragmented among State government agencies, CSIRO, Universities, CRCs and private bodies. Consolidation under the national framework (National Primary Industries research, development and extension framework) is required to improve performance and reduce duplication.

FWPA Limited is generally perceived to be a national body which can resource and coordinate RDE on behalf of the broader forestry sector. FWPA does have a structure with appropriate legislation and accountability to ensure levies are collected across most of industry and utilised efficiently for RDE purposes. However, its current shareholders seem to have a more restrictive view of its responsibilities and territory at this time. A compulsory levy, other than taxes, is the only effective mechanism likely to capture investment by the ‘free rider’.

D. Examine the appropriateness of current funding levels and arrangements for agricultural research and development, particularly levy arrangements, and Commonwealth matching and other financial contributions to agriculture, fisheries and forestry RDCs;

The FWPA is a very administratively efficient organisation. The advisory group structure is effective at prioritising research needs across industry and improving research proposals.

The total amount of levies and matching contributions available through FWPA is far too small for such a large and diverse industry like forestry. The levy needs to increase closer to the 0.5 percent of industry gross value of production. A change would require industry support, and leadership is needed to effect such an increase. There seems to be conflict between growers and processors in the forestry sector, which is largely attributed to the point of collection of the levy.

When the pool of funds is too small and competition is high, there is a temptation for RDCs and IOCs to strive for more and more leverage. This can be counterproductive as it introduces ‘shuffling’ and ‘churn’ and reduces the effective marginal benefit (resources for RDE) once administration costs are considered. It can also discourage participation by smaller (but efficient and innovative) service providers which may not have the muscle and resources of larger agencies such as CSIRO. Waste can also result from shuffling across agencies and countries where efficiencies may not result, and focus and capability is lost. RDCs and IOCs do not always fully account or cover the actual cost of RDE. Not funding reasonable administration and overheads of service providers is commercially unrealistic.

E. Consider any impediments to the efficient and effective functioning of the RDC model and identify any scope for improvements, including in respect to governance, management and any administrative duplication;

The levy model with matching contributions from the federal government does provide a good mechanism and incentive for industry to resource RDE on an industry wide basis.

In forestry it seems matching the industry levy alone is too restrictive. An additional ‘donor company’ or similar voluntary contribution model designed to encourage further private investment is needed. This option should be made available to FWPA Limited urgently as private and government investment into RDE would undoubtedly increase. There is just too much demand for the very limited funds currently available through FWPA Limited. Voluntary contributions would be an attractive option to encourage more investment by private companies into a national industry based cooperative like the STBA which is involved in tree improvement and associated research, activities which are largely considered to be of a pre competitive nature.

The RDC and IOC model is different and can be administratively more straightforward than a CRC model on occasions. The IOC for forestry is more flexible than the RDC model. They operate
differently, and both are important vehicles for facilitating RDE. CRCs can be somewhat researcher driven, lack focus and can be too fragmented for industry to engage effectively. IOCs and RDCs can also be criticised for being preoccupied with non RD activities such as marketing and promotion, as this quota of levies is not matched by the Federal government. It is noted that the levy goes towards RDE, but also heavily to marketing and promotion in FWPA’s case. This causes conflict when resources for RDE are too limited.

**Mechanisms to identify opportunities collaboratively across RDCs and IOCs would be helpful.** One of the more important developments that has occurred in tree improvement has been the development of analytical software systems like TREEPLAN. Such leading edge technologies have come about as a result of the STBA and its associates working collaboratively with the livestock industry. These technologies have great potential for other rural commodities as they can be easily adapted for other plants and crops. It seems that it is somewhat difficult (barriers) to work within other sectors unless a relationship pre exists. RDCs and IOCs have preferred suppliers of services in R, D and E. This is not an unusual situation in a competitive environment, but isolation of the commodities can limit or delay the adoption of innovation.

**F. Consider the extent to which the agriculture, fisheries and forestry industries differ from other sectors of the economy with regard to research and development; how the current RDC model compares and interacts with other research and development arrangements, including the university sector, cooperative research centres and other providers; and whether there are other models which could address policy objectives more effectively;**

The agriculture, fisheries and forestry industries are often involved in resource development and security (raw materials as feedstuffs for food, energy and shelter). Primary production companies are not usually vertically integrated, with producers isolated from the consumer. This means it can be difficult for them to benefit from investment in RDE as costs are absorbed well before the processed product is sold.

A balance between private and industry investment must be achieved given the importance of forestry to the economy, balance of trade, and security of resources for processing and environmental purposes. This is difficult to achieve given low returns on investment in forestry, and the long time frames (decades) from investment to delivery of product at harvest.

Collaboration and partnerships across RDCs, IOCs, universities and research agencies is increasingly necessary for industry to access the range of specialist skills needed to service its portfolio of projects and operations.

Tree improvement is core business of the national Association, and our tree breeders and researchers work closely with breeders and geneticists working in other crops and the livestock industry. It is essential that RDCs and IOCs look for synergies to identify opportunities and avoid duplication. The STBA and partners have ongoing relationships with the IOC for forestry, FWPA Limited (Forestry and Wood Products Limited), and have worked with the previous RDC.

It is certain that developments in tree improvement and value adding to the forestry sector has been enhanced through FWPA as a consequence of making more financial resources available for research and development and consolidation by joint investment across businesses and agencies with specific objectives in mind.

**G. Examine the extent to which RDCs provide an appropriate balance between projects that provide benefits to specific industries versus broader public interests including examining interactions and potential overlaps across governments and programs, such as mitigating and adapting to climate change; managing the natural resource base; understanding and responding better to markets and consumers; food security, and managing biosecurity threats;**

The degree of balance will be directed by the business drivers of the largest shareholders. Without public representation, the broader interests of the public will receive only token attention.
The forestry sector is a business increasingly driven by shareholder financial returns, maybe with somewhat less emphasis placed on community needs for future generations. The forestry industry is increasingly aware about its relationship and responsibility to the Australian community and the environment in which it is licensed to operate, but financial returns to stakeholders are paramount.

H. Examine whether the current levy arrangements address free rider concerns effectively and whether all industry participants are receiving appropriate benefits from their levy contributions.

A compulsory levy is likely to be the only effective way of getting all industry participants to co invest in RDE. This is particularly the case for forestry where production horizons are long term, and may not necessarily match the more immediate economic imperatives of companies.

Yours sincerely

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