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ECONOMICS, ECOLOGY AND THE ENVIRONMENT

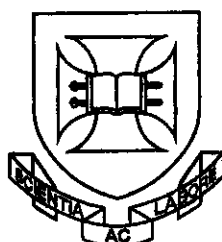
Working Paper No. 18

**Compensation for the taking of Resource
Interests: Practices in Relation to the Wet Tropics
and Fraser Island, General Principles and their
Relevance to the Extension of Dugong Protected Areas***

by

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Compensation for Taking of Resource Interests

1. Introduction

The question of whether compensation should be paid for the taking or abrogation of natural resource rights or interests and how much should be paid and on what basis is complex. The *Report of the Commission of Inquiry into Compensation for the Taking of Resource Interests* (British Columbia, 1992) indicates that the availability of compensation depends upon the existence of private property rights expressed or implied. It points out (p. 17), 'Property is a bundle of legally defined mutable right. The owner is free to exercise those rights and is free from interference by others in their exercise. These rights range from strong to weak, and even the strongest are subject to restrictions. When rights are modified there is commonly an effect on the value of the property'. These rights are often modified by government.

The report goes on elsewhere (p. 19) to state that 'not all [government] interferences with property can possibly be compensable... The definition of (whether defined by statute, judicial interpretation, or custom) of a compensable taking is influenced strongly by pragmatism. There are no hard and fast rules, but some generalisations are possible. The stronger the property right, and the greater the owner's loss, the more likely the taking will be viewed as compensable.'

Queensland fishers have firm licences and endorsements to use different types of nets. The proposed dugong protection areas limit these rights. Therefore, the value of businesses which rely on these rights will be reduced, in many cases substantially. Hence, a *prima facie* case for compensation exists.

In the Australian case, a number of precedents exist in relation to the taking of natural resource interests by the state. Consider for example, the loss of private rights (expressed and implied) in relation to the World Heritage listing of the Wet Tropics region of North Queensland and similarly in relation to Fraser Island.

2. The Wet Tropics Structural Adjustment Packages

The Wet Tropics Structural Adjustment Package consisted of three basic components:

- (1) Business compensation;
- (2) Labour adjustment assistance; and
- (3) Alternative employment creation strategies.

All three components can be regarded as attempts to compensate community members for the taking of resource rights from which they previously enjoyed benefits.

Labour adjustment assistance included:

- (1) Dislocation allowances;
- (2) Early retirement benefits;
- (3) Retraining subsidies, and
- (4) Relocation allowances.

In order to create alternative sources of employment for displaced timber workers, the Commonwealth Government, in addition to the above initiatives, began public sector and local community programmes, and provided subsidies to the private sector to foster employment in the local regions affected. Apart from providing compensation to displaced timber workers, these initiatives also incidentally provided some compensation to local communities for the loss of economic injections (and multiplier effects) due to cessation of logging operations.

Let us consider each of the three components of the Wet Tropics Structural Adjustment Package (SAP) in more detail and consider its relevance to the proposed extension of Dugong Protected Areas (DPAs).

BUSINESS COMPENSATION: This scheme allowed for payment of up to \$24.4 million to companies and businesses adversely affected by cessation of logging. Compensation was 'only

paid to those businesses who could clearly demonstrate that the Commonwealth Government decision to cease logging in the World Heritage Listed forests resulted either:

- The closure of their operation;
- The forced rationalisation of their businesses; or
- A substantial reduction in their business viability' (Lynch-Blosse *et al.*, 1991, p. 46).

It would be a reasonable expectation given this case that those with similar adverse effects on their business due to extension of DPAs should be compensated by the Commonwealth Government.

About three-quarters of businesses which sought compensation under the Wet Tropics SAP were successful in that they were ruled to be eligible for compensation, Lynch-Blosse *et al.*, (1991, p. 47) observe: 'The types of businesses which were successful in their claim for compensation include larger timber mills, factories and manufacturing establishments which were end-users of rainforest timber, contract timber cutters, sleeper cutters, and organisations which were involved in the maintenance and repairs of the timber-related equipment (e.g., Saw Doctor)'. This meant that businesses either having a relatively direct forward or backward economic linkage with logging in the Wet Tropics World Heritage listed areas were eligible for compensation. By analogy, processors and others dependent on the supply of fish from extended DPAs would have a case for compensation as would those involved in the maintenance and repair of equipment used in areas to be converted to DPAs, as well as of course fishers themselves.

A two-staged process was involved in determination of business compensation claims. Firstly, a government body (the Rainforest Unit of DASETT) determined whether in terms of the criteria an applicant was eligible for compensation. Then an accounting firm (Price Waterhouse), hired by the Government, was asked to assess the level of compensation considered to be fair and reasonable on the basis of:

- A detailed analysis of the earnings in recent years of the business being assessed and an

estimate of likely future earnings in the absence of World Heritage Listing;

- An assessment of the value of assets used by that business in deriving income from rainforest logging and milling activities; and,
- An assessment of other compensation claims made by that business’.

If a parallel procedure were adopted to the extension of DPAs similar information would need to be collected in relation to fishing in DPAs. Account would need to be taken of loss of supply of fish from DPAs, business closures, lost contracts and business.

Unfortunately, the method of determination of compensation is not precisely specified above. It is more specific for the loss of timber rights on Fraser Island. In that case (as discussed below) the basis of business compensation was basically the anticipated reduction in the capitalised value of the business as a result of the loss of timber rights.

LABOUR ADJUSTMENT ASSISTANCE: For employees adversely affected by the cessation of crown rainforest operations in the nominated World Heritage Area this consisted of:

- Dislocation Allowance;
- Early Retirement Allowance;
- Retraining Subsidy; and
- Removal and Relocation Assistance.

To be eligible applicants had to have been employed in the timber industry or a closely related business for at least 12 of the 18 months before retrenchment and have been retrenched as a result of the cessation of logging in the area included on the World Heritage List. Given this precedent, a similar labour adjustment package should be available to employees adversely affected by extension of the DPAs.

ALTERNATIVE EMPLOYMENT CREATION STRATEGIES: Means used to obtain alternative employment for displaced timber workers included:

- Public Sector Projects such as new or additional local council projects;
- Tree planting projects funded by the Commonwealth Government;
- Financial assistance ‘to individuals, private sector enterprises and other organizations who could propose feasible and economically viable initiatives which would employ eligible displaced timber workers’ \$3.7 million was allocated for this; and,
- Wage subsidy payable to employers (*outside* the timber industry) of eligible displaced timber workers. (The subsidy was payable for six months).

The Wet Tropics Structural Adjustment Package was comprehensive. It provided compensation to all those directly or closely affected by cessation of logging in the World Heritage Area, and indirectly reduced the economic impact of this cessation on local communities. It is a benchmark Australian case for the taking of resource interests by the state, in this case the Commonwealth Government. On the basis of this precedent one would expect similar types of compensation to be available should DPAs be extended in Queensland as is proposed. Decisions on compensation following the Fraser Island Report to stop logging there and to proceed with application for World Heritage Listing of Fraser Island provide additional guidelines for compensation in Australia in relation to the taking of resource interests.

3. Compensation for the Loss of Timber Rights on Fraser Island

Following the Fraser Island Report, it was decided that logging on Fraser Island would cease by the end of 1991, and a compensation package described as ‘A Special Growth and Development Package for the Great Sandy Region’, was devised. In consequence, total financial assistance of \$37 million was proposed for the region. Of this \$21.2 million was to be contributed by the Queensland Government and the remaining \$16.5 million by the Commonwealth Government.

As in the case of the Wet Tropics, the package involved *three* basic elements:

- Workers’ Adjustment Package;
- Schemes to create alternative employment opportunities; and,

- Compensation for businesses directly and substantially affected by phasing out of logging on Fraser Island.

However, there were some differences in 'Fraser Island' packages compared to the Wet Tropics settlement. For example, workers were not offered a retirement allowance in the Fraser Island case. Emphasis was on obtaining alternative employment for displaced workers. Furthermore, in the Fraser Island case, special mortgage assistance could be made available to displaced workers. The Special Workers' Adjustment offered the following:

- Dislocation assistance of up to \$35,000 based on years of service;
- Priority for alternative employment in government funded schemes;
- Relocation assistance of up to \$5,000;
- Income supplement for 12 months [to displaced workers sufficient to bring their income to its previous level]; and
- Special mortgage assistance for up to three years to ensure that repayments do not exceed 30 per cent of gross household incomes' (The Queensland Government, 1991, p. 3).

Government-funded employment initiatives were designed to provide alternative employment to displaced workers if they wished to take advantage of these. However, employment in projects resulting from these initiatives was not confined to displaced workers even though they were given priority in employment. The schemes were intended to compensate or more than compensate, for any decline in regional incomes as a result of the cessation of logging on Fraser Island.

It is *worthwhile considering the basis of compensation for businesses directly or substantially affected by the phasing out of logging on Fraser Island*. The State Government claimed that, 'there is no legal obligation to pay compensation to affected businesses', (Queensland Government, 1991, p. 11). Whether or not that is so is however probably unclear given the practices adopted in the case of the Wet Tropics. Nevertheless, the State government was prepared to consider *ex gratia* payments to businesses directly or substantially affected by the decision to phase out logging on Fraser Island.

The criteria for eligibility of businesses to be considered for compensation were *narrower* than in the case of the Wet Tropics. To be eligible for consideration, a business had to depend heavily on the timber industry for its income. In the Dugong Protection case, if the same rule applied, a business would have to be heavily reliant for its income on fishing for it to be considered for compensation. The exact position in relation to Fraser Island was as follows:

‘To be eligible for compensation, about 50 per cent of a business’s income would need to be reliant on the timber industry. The Treasurer would consider particular cases involving less than 50 per cent if it could be shown the viability of the business had been substantially affected.’ (Queensland Government, 1991, p. 11).

The basis of compensation was intended to be the loss of value of business due to the cessation of logging on Fraser Island.

In the case of a business forced to close as a result of the decision to phase out logging, Price Waterhouse would:

- [1] Value the existing business as a going concern based on capitalisation of future maintainable earnings;
- [2] Deduct from this value the net book value of the physical assets retained by the business; and,
- [3] Then adjust for any extraordinary expenses incurred by the business relating to closure, (Queensland Government, 1991, p. 11).

In this case [1] - [2] - [3] would be the basis of compensation.

However, the Government did not necessarily pay the loss in value of business as determined by Price Waterhouse. It decided on a case by case basis taking account of Price Waterhouse’s assessment and other factors such as:

- Avenues available for mitigation of losses and other business opportunities;

- The commercial risks associated with operating the business in an environmentally sensitive area. – e.g., if expensive assets were acquired recently, it may not be appropriate to compensate the party for full loss of value; and,
- The Government's overall objectives for industry rationalisation in the region.

Compensation payments would be staged to avoid the situation where a lump sum is paid up front but actual losses do not materialise in line with the original projection.' (Queensland Government, 1991, p. 11).

Consequently the compensation available to businesses for the taking of resource rights was relatively uncertain.

Regarding the treatment of physical assets in the case given above, one could question whether these should be deducted at net book value. Market values would provide a better indicator of their worth and could well be smaller than net book value.

4. Comparisons Between Compensation in the Wet Tropics and Fraser Island Cases

The basis of eligibility for business compensation in the Wet Tropics was more generous than in the Fraser Island case and actual payment of the compensation less restricted and qualified.

Whereas early retirement allowances was available to displaced labour in the Wet Tropics area, this was not so for the Great Sandy Region. In the latter case emphasis was on finding displaced workers alternative employment. To find such alternative employment in the Great Sandy Region may have been easier than in some regions affected by the Wet Tropics World Heritage listing.

The creation of alternative employment opportunities in the Hervey Bay Region were only partly intended to absorb workers displaced as a result of cessation of logging on Fraser

Island. New projects also directly created employment for other workers as well. In the case of the Wet Tropics, more weight was placed on the absorption of displaced timber workers by the alternative employment schemes devised. Therefore, the Fraser Island Package seems to have been designed to provide greater community-wide compensation and benefits with these not all tied specifically to displaced workers. The process of compensation is to a considerable extent a political process. It is influenced by the political power of the parties involved; both those directly affected and the communities in which they live.

5. General Observations on Compensation for the Taking of Resource Interests and Relevance to DPAs

It was observed in the introduction that a good deal of pragmatism is involved in the payment of compensation for the taking of resource interest by the state. The greater however the economic loss sustained by a party affected by loss of resource interest and the more established or definite are these rights, the more likely that compensation will be paid.

Furthermore, 'government is likely to respond to the demands of well-defined, compact interest groups whose members clearly recognise either the benefits or costs which will fall on them as a result of a particular policy, while ignoring or discounting the benefits or costs occurring to ill defined, diffused interest groups who do not clearly recognize the impact of the policy upon them' (Buchanan, *et al.*, 1980; British Columbia, 1992). Therefore, compensation is more likely to be paid to those damaged by a resource expropriation if they form well-defined interest groups that 'are capable of clearly and forcefully making their interests known to policy makers'. This indicates that it is essential that all who will be adversely affected by extension of DPAs form or belong to such groups. Otherwise, they are more likely to suffer uncompensated economic loss. Furthermore, the case for compensation must be put clearly and forcefully to policy makers.

Assessing the economic loss occasioned by the taking of resource interests is a complex task not least because of the considerable economic and other uncertainties involved. While a complete coverage of the subject is not possible there some specific matters that are worth raising

because of their possible relevance to government decisions to extend the DPAs. Let us consider in turn business compensation; compensation for displaced workers and community-wide impacts and restitution.

BUSINESS COMPENSATION: The most important thing to consider in assessing the economic loss incurred by a business as a result of the taking of its resource interests is the reduction in its capitalised value as a consequence of this loss. This reduction (R) is equal to the difference of net present value of its anticipated future net earnings should its resource interests be maintained (V_R) and this if its resource interests are lost. In other words $R = V_R - V_E$.

It is however difficult to estimate the reduction (R) in the capitalised value of the firm due to loss of its resource interests because future income is uncertain. Furthermore, the size of R depends on the rate of interest used to discount future earnings.

The reduction of capitalised value, R, does not take account of the value of assets physical or otherwise retained by the firm. To the extent their assets can be sold they reduce the loss suffered by the business. Ideally such assets should be valued at realizable or market value once the business loses its resource interests. There does not seem to be any logic in valuing them at net book value as in the Fraser Island case. If the business' assets are rather *specific* to exploitation of its natural resource interests, then after loss of these resource interests these assets may have little use elsewhere. Hence, their market or realizable value may be much less than their book value after expropriation of the natural resource under consideration. Hence, it is appropriate to deduct, only the realizable value of the business' assets from its reduction in capitalised value in determining the business' economic loss (EL). In addition, to estimate a business' economic loss, it may be appropriate as mentioned in the Fraser Island case, to add any special expenses (C_S) a business has to incur either because it must close down or restructure substantially due to its resource loss.

Taking these matters into account, the economic loss of a business due to loss of resource interests would be estimated as:

$$\begin{aligned}
EL &= R - A_M + C_S \\
&= (V_R - V_E) - A_M + C_S.
\end{aligned}$$

In relation to the extension of DPAs, it has been suggested that reduction in the value of licences and endorsements might be used as a basis for compensation or the Commonwealth might buy back entitlements from fishermen at their market value prior to moves to extend the DPAs. This, however, would be inadequate to compensate fishers for their loss.

First the market for fishing entitlements is thin and therefore a far from a perfect market. Secondly and more importantly no allowance is made for *asset specificity* - that is for the losses of fishers on their physical capital, geared specifically to the netting operations in new areas to be included in DPAs. At the most, the sale price of entitlements represents capitalised resource rents and does not capitalise the normal return on capital used to exploit the resources in question. The normal return from the capital will be lost on the taking of the resources and even the undepreciated value of this capital may not be realisable in the market. Furthermore, no allowance is made for the special cost factor, C_S , mentioned above.

The specificity of capital needs to be given particular attention in claims for compensation for loss of resource interests. This is not only true of physical capital but of other forms of capital too. Not enough attention has for example been given to human capital in the past. Owner/managers as well as employees embody much human capital which may be *specific* to their business operations reliant on natural resources. Their next best employment may not be able to use this capital. So this capital becomes a sunk cost to individuals just as physical capital may have a sunk cost. The longer individuals have been operators in an industry, the larger is their human capital (as a rule) *specific* to those operations and the greater their loss is likely to be when those operations are no longer possible. This needs to be taken into account for example in the case of owner/operators.

COMPENSATION FOR DISPLACED WORKERS: While compensation for the taking of resource interests from businesses may have a quasi-legal basis, the case for compensating

workers seems to be more a question of equity. Compensation packages have included measures to find alternative employment for displaced workers, payments to compensate for lost income in alternative employment (Fraser Island case) and allowances to cover expenses included in finding alternative employment. Similar types of compensation could be expected for fishermen displaced by extension of DPAs.

COMMUNITY-WIDE IMPACTS AND RESTITUTION: While governments have no legal requirement to compensate communities which may be adversely affected by the loss of resource-interests, political reality often requires that such restitution be made. This is especially so when a regional economy depends heavily on use of the resource as a source of economic injections. The loss of exploitation of this resource through various multiplier effects can depress the local economy. Therefore, adverse economic effects are not confined to those directly affected by the withdrawal of resource rights or interests.

Because of asset specificity or capital specificity, including that of human capital, one problem that can arise when natural resource rights are restricted is that displaced business and workers increase their exploitation of closely related resources. If for example, fishers are restricted in one fishery, they may crowd into other fisheries, thereby causing over exploitation in these fisheries and depressing incomes in these to below normal levels. In a sense, this exacerbates the social and biological damage caused.

6. Concluding Comments

Commissioner Richard Schwindt (British Columbia, 1992) indicates that the rationale (including the economic rationale) for the taking of resource interests ought to be carefully considered before a decision is made. Clearly the value to the state (government), acting on behalf of the community, in taking resource interests should exceed the economic value to users of these resources of retaining the rights. In relation to the proposed extension of DPAs these values have not been estimated or even discussed to any extent.

Second note that community values are changing in relation to the economic exploitation

of natural resources. There is now less emphasis on the direct economic benefits to be obtained from the use of these resources and more emphasis on indirect non-use values. While this may be reasonable, it may be unreasonable to expect those given specific resource-interests not be compensated for a change in community or government attitudes affecting their previously settled interest.

Third, it could well be that fishers are not the main cause of the decline in the size of dugong populations. For example, habitat change brought about by spillovers from land-based agriculture and other economic activities could be a major cause of such a decline. If this is so, this would be a further reason why the full cost of further protection for dugongs should not fall solely on fishermen. To impose the full cost of dugong protection on fishermen would be inequitable.

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