

PROOF



COMMONWEALTH OF AUSTRALIA

JOINT STANDING COMMITTEE ON TREATIES

(Subcommittee)

Reference: Impact on Australia of the UN Convention to combat desertification

BOOROWA

Tuesday, 22 April 1997

PROOF HANSARD REPORT

CONDITION OF DISTRIBUTION

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JOINT STANDING COMMITTEE ON TREATIES

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Senator Murphy	Mr Tony Smith
Senator Neal	Mr Truss
Senator O'Chee	Mr Tuckey

For inquiry and report on -

1. the domestic ramifications of Australia having ratified the Convention;
2. Federal and State progress in complying with the Convention;
3. the difficulties and concerns arising from implementation in its current form;
4. possible inconsistencies between domestic jurisdictions and the need for agreed national standards;
5. the need for a mechanism to promote, monitor and report publicly on compliance and to implement public consultation processes;
6. the adequacy of the administrative, legislative and legal infrastructure in addressing the needs of children;
7. the adequacy of programs and services of special importance to children; and
8. any further action required in relation to the Convention.

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WITNESSES

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CURLEWIS, Mr Ian Adrian, Secretary, Boorowa Regional Catchment Committee, PO Box 1, Boorowa, New South Wales 2856	90
DUNSTAN, Mr Russell James, Hon. Secretary/Treasurer, Rye Park Landcare Group Inc., c/o Brooklands, Yass, New South Wales 2582	90
JENKINS, Ms Janelle Kathryn, Project Officer, Boorowa Regional Landcare, PO Box 1, Boorowa, New South Wales 2856	90
MARSH, Mr David Stephen, Member, Boorowa Regional Catchment Committee, PO Box 1, Boorowa, New South Wales 2856	90
SOUTHWELL, Mr Andrew David, ‘Glenflesk’, Rye Park, New South Wales 2586	90
VENESS, Mr Ron, President, Rye Park Landcare Group Inc., Yass Street, Rye Park New South Wales 2586	90

JOINT STANDING COMMITTEE ON TREATIES

(Subcommittee)

Impact on Australia of the UN Convention to combat desertification

BOOROWA

Tuesday, 22 April 1997

Present

Mr Tuckey (Chairman)

Mr Adams

Senator Murphy

The subcommittee met at 1.20 p.m.

Mr Tuckey took the chair.

[1.20 p.m.]

CLARK, Mr Roger Alan, President, Boorowa Regional Catchment Committee, PO Box 1, Boorowa, New South Wales 2856

CURLEWIS, Mr Ian Adrian, Secretary, Boorowa Regional Catchment Committee, PO Box 1, Boorowa, New South Wales 2856

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VENESS, Mr Ron, President, Rye Park Landcare Group Inc., Yass Street, Rye Park New South Wales 2586

CHAIRMAN—Good afternoon, ladies and gentlemen. I thank you for your attendance here today. I declare open this second public hearing of the committee's inquiry into the implications for Australia of the UN Convention to Combat Desertification. Australia signed this convention in December 1994 but has not yet ratified it. In a sense, that is what this inquiry is about: whether Australia should ratify the convention, with all that that act means legally and morally. Our report into this matter will be tabled in both houses of the parliament, and our views will be taken into account by the government when a decision is made about whether or not Australia should ratify this convention.

The secretariat has brought along some material about the committee, and copies of papers relating to this inquiry. The committee has already held one public hearing on this matter and there will be others. Copies of the transcript of the hearing held on 2 October last year and the submissions received so far by this inquiry are available here today.

Desertification is a complex topic, and the word can be misunderstood. It might be better if we use the term 'land degradation', a problem which can have many causes. This morning we have looked at land on several properties in the Boorowa area. This was the first of several visits to different parts of the country which committee members would like to make to see the problems and the solutions for themselves. I would like to take the opportunity to thank the various owners who have let us visit their properties and given us their time. Our thanks are also due to Ms Libby Elliot of Rural Property Awareness Tours

for her work in making the arrangements for our visits.

The purpose of the hearing today is much more about putting on the record the issues you think are significant in terms of Australia's involvement in a convention of this nature than just simply dealing with whether or not we should ratify this convention in time. There are many, many aspects of that appearing in this district relating to rising watertables, salinity, and those sorts of issues.

We are interested in knowing your estimates of the sorts of costs to all sectors, were the positions or circumstances here to be resolved almost entirely, because they are the sorts of things that really arise from this convention in terms of whether or not Australia should be making certain commitments to the rest of the world. The question arises whether or not in making that commitment others could then demand expenditure, say, in billions of dollars to rectify the problems that are occurring within Australia.

I now ask the representatives of the various district land care groups to be sworn in by the secretary or make an affirmation. For your information, the committee has already agreed to record as submissions or evidence some of the submissions which were provided to us this morning. They will be of assistance to us in building up our report. I just draw that to your attention. For those of you who contributed to those submissions, you are very welcome to refer to them in passing.

Mr Clark—I am the current chairman of the regional group. Initially, I will give you a bit of an overview of the region and its function and where basically it is heading. How you extrapolate from our experiences in this region and use that information is probably up to you. You are looking at a fairly big picture, and we are looking at a fairly small picture.

I do not know what you covered this morning in your farm visits. Effectively, Boorowa Landcare has been functional in the Boorowa region for about seven years. It now covers an area of about 165,000 hectares and six individual land care groups. This regional group is a umbrella group that draws all those groups together so that we can then start to address the problem on a regional basis and start to look at the worst affected areas in order to prioritise, effectively, on-ground works. That basically in a nutshell is what the function of this group is.

The major problem identified has been dry land salinity over the years. That problem encompasses a multitude of evils including soil acidification, tree decline, habitat decline, and all sorts of problems with soil degradation and land degradation. But ultimately it ends up in dry land salinity. Because of the complexity of the issues we are looking at, we have decided to develop a catchment plan. That catchment plan involves quite detailed mapping.

We are using a computer program to install this information on a database. That is

the objective, and we are in the process of doing that. This information includes such things as soil types, hydro-geological data, remnant vegetation, newly planted reforestation, existing deep-rooted perennial pastures, and aspects involved in the cropping phase in the region.

As much physical land resource data as we can get our hands on is going onto that database. This regional group can then look at all the data and extract from it enough information, hopefully, to make decisions on where the worst affected areas are in the region, and then develop programs to try to address those problems. Obviously, that involves a pretty major degree of cooperation between land care groups in the region because it could eventuate that the major problems might not all be scattered right across the region; there might be isolated hot spots that will necessitate a great deal of regional cooperation in order to spend as much resource as possible on those badly affected areas.

As I see it, I would not say that we have been funded quite generously in the past, but we have been funded enough to enable us to progress down this path of catchment planning. Certainly in the past we have been funded enough to enable the establishment of a productivity link between the programs we are using and the outcome. If it is not productivity linked, it is a one-off situation.

In the past the money that we have used has been spent on establishing deep-rooted perennial pastures, tree root establishment, discharge site rehabilitation and stabilisation, and some river-care type riparian zone activities. In that experience, the bit of catalytic money that has entered the system has stimulated landowners to try deep-rooted perennial pastures in a lot of their management systems. As a result of that, they have gone on with the job. They have done it themselves. Obviously, that bit of stimulus in the first instance has enabled them to continue their program enough to finance the pasture establishment themselves in the future.

I see the same thing happening perhaps with agroforestry; probably the next step in developing our catchment plan is that large scale agroforestry may need to be used to address the levels of recharge that we are trying to control. There has to be a lot of cooperation between the scientific sector and grassroots members of the community. I say that because I think in the past the conduit, the pipeline of information from the research sector to the grassroots, the people who are at the coalface implementing the on-ground works, has not been terribly good. Time and time again, the wheel keeps being reinvented with demonstration sites. This replication—I suppose you could call it—of research work is probably not good. Much of that money would be a lot better spent on-ground.

To cut a long story short, we are very happy with the way land care is going in the Boorowa region. We have put a lot of emphasis on education and community awareness. Certainly, that has been the group's major thrust. Once the community becomes aware of a problem, they want to do something about it. There has to be ownership of the problem; there has to be grassroots awareness of the problem for something long term to be done. If

it comes from the top down, in my experience, there never seem to be long lasting effects.

Mr Marsh—I will add a couple of things. Roger has mentioned education. I think education is pretty crucial to success in these sorts of programs that we have been trying to run. The outcomes we get from a community, from the point of view of having something imposed upon us as opposed to our doing something after being educated and therefore believing in it, are vastly different. We have tried to run community awareness programs of, firstly, the problems and, secondly, the solutions as we see them. I think both those issues are critical.

One of the things that is disturbing for us from the point of view of sustainability and the point of view of how long we can keep it going is the real costs of implementation of the programs that we are running. Although an economic evaluation has been here for the catchment which shows a positive cost benefit, the real cost to farmers of implementing the programs is substantial. When you have the poor terms of trade which we currently have and which seem to be a fact of life in rural Australia, particularly where you are running sheep as your major enterprise, it brings into question some other issues.

Because you are getting poor returns for your produce, as in wool, people see the only way of keeping their heads above water as producing more and more. While in the short term that might provide some financial fixes, in the long term when you apply that sort of strategy to resource use, if produce prices stay low for a long time, it can have a deleterious effect on the sustainability of your resource base. That is something that is pretty concerning. If you look around today, we are on the edge of winter and there are fairly dwindling supplies of vegetation right across the catchment. Not only does that have an effect; it also affects the ability of farmers to adequately provide nutrients for the plants that they are growing because it is harder when they are pushed by poor commodity prices.

The other things that communities like ours are having a lot of trouble with and which I cannot see turning around in the short term are the social aspects, such as employment on farms and the retention of young people in the community to stay in the district and work on farms. For example, eight men worked our farm in the early 1900s, and it was smaller than it is today. Now I run it on my own. That is a common story right across the catchment. It is also common that both parties to a marriage very frequently work to make the farm viable. They are all aspects that impact on the catchment, and I think they need to be taken into account in the programs we are running. Part of sustainability is social and economic stability. It is a real battle for us at the moment.

Mr Clark—At the end of the day what we are really looking at in this catchment is water health: the health of the Lachlan River and the subsequent Murray River. At present, the Boorowa River is exporting some thousands of tonnes of salt a week into the Lachlan River. The Boorowa catchment as a component of the whole Murray-Darling

Basin is very small, but the amount of salt it is contributing to the Lachlan and the greater system is, by percentage, very large. That is one of the reasons why the Boorowa region has to get off its behind and do something about dry land salinity. Ultimately, if it is left unchecked, the salt loads in the Lachlan will have huge deleterious off-site effects.

Mr Marsh—That is the big issue. The costs of the off- site effects of land degradation in this catchment have not been costed into this report. Even though that report shows a positive cost benefit, it has been estimated that off-site effects of salinity can be up to 80 per cent of the total costs. Land degradation in this area affects not only us; it also has a more serious effect downstream.

Mr ADAMS—Do you think people downstream might reach the conclusion that you should not be doing what you are doing up here?

Mr Marsh—It might be the other way around: they might feel that they would like to contribute to helping us with the problem so that they do not suffer from it. We have not come to any cost sharing arrangements with anyone. That is perhaps a way that some of these things may be funded in the future.

CHAIRMAN—In that regard I want to draw your attention to some of the aspects of this convention as prepared and signed. Article 2, the objective, states:

1. The objective of this Convention is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas.

I think that sustainable development is particularly important when some of the recommendations are that you just lock things up. I want to make reference to article 21, which states:

(a) facilitate the provision of necessary funding at the national, subregional, regional and global levels for activities pursuant to relevant provisions of the Convention . . .

Down a little further it states:

. Affected developing country Parties shall utilise, and where necessary, establish and/or strengthen, national coordinating mechanisms, integrated in national development programmes, that would ensure the efficient use of all available financial resources. They shall also utilise participatory processes involving non-governmental organizations, local groups and the private sector, in raising funds, in elaborating as well as implementing programmes and in assuring access to funding by groups at the local level. These actions can be enhanced by improved coordination and flexible programming on the part of those providing assistance.

The question is: is that being done? That really raises Mr Adams's point: what are people further downstream contributing to your efforts to stop their salinity problems, remembering that the salt was there before you arrived? Is it in fact discharging into the river in any greater quantities than it used to? Irrespective of that, do you think there is a national effort? Do you think there is a regional effort in terms of addressing this problem?

Ms Jenkins—There have been efforts by various government agencies to try to reach some sort of agreement about a lot of this stuff, but it changes. Every time you turn around, they change their strategy or the way they want to look at something. Landcare and landholders try to keep up with the different focuses, and it is very hard.

Mr Clark—Structural change is rampant in government departments, as it has been for the last three years in this particular field. Unfortunately, that is a bit of a disadvantage for the actual resource managers because you cannot stay focused on the one system that you are trying to utilise to manage the resource.

Ms Jenkins—Something else becomes the flavour of the month. There are heaps of money going into fish care for whatever reason. People have to keep up with those sorts of things.

CHAIRMAN—Is that a problem of top-down funding?

Ms Jenkins—Absolutely.

CHAIRMAN—Would there be better advantage in bottoms-up funding?

Ms Jenkins—That is what they are trying to impose at the moment.

Mr Clark—That is what regionalisation is about. For instance, in this catchment there will be a group of 12 or 14 with some technical advice looking at the region and saying, 'These are our worst problems' and, 'These are the things we want to fix first.' That will then go to the next tier up which will be a total catchment. It will be the Boorowa catchment plus 10 or 20 others. Then they will look at the significance of that in the scheme of that catchment. It goes up like that until you get to the Murray-Darling Basin. That is the system that they are trying to put in place. From a funding point of view at the moment—and hopefully it is set to change—it is a top-down funding process.

Mr ADAMS—And that has caused difficulties.

Mr Clark—Great difficulties. They get 2,000 or ,000 applications for funds, and they would have no idea where to allocate those funds as to the best priorities. That is probably a slight overstatement, but hopefully you see what I mean. There will be great difficulty. We are on the ground and we are having trouble working out our priorities

within our little catchment.

Mr ADAMS—Is there nobody from this area who sits on the committee?

Mr Clark—On the next one up, the TCM, we have a member.

CHAIRMAN—The money is currently coming from much higher up than that, is it not?

Mr Marsh—Yes. The TCM do not distribute the funds.

Mr Clark—There is a state assessment panel. I am not sure who has the most say. I think the state assessment panel has the most say. I am not sure where they are drawn from because they changed the structure of it recently.

Ms Jenkins—They are drawn from agency people. The state assessment panel determines where the cut-off line is for projects and how much money they have to spend. They determine where the line is. The Lachlan catchment management committee prioritises projects in this area. The problem is that they are trying to impose this prioritisation system, but the government have waited for the regions to do it. They have not really given a hand to people like these guys to come up with some sort of a workable structure; they have just waited.

Mr Clark—The problem is that everybody is itching to put money on the ground. Unless your planning is up to a level where you can look at the whole situation and say, 'This is the worst affected area,' you do not really have a chance of spending that money to its absolute best benefit.

CHAIRMAN—What is the status of your planning in this region?

Mr Clark—The Boorowa group, which was formed six or seven years ago, had a catchment plan but only for one-third of the Boorowa River catchment. That was then regionalised. We have a fairly good level of planning in one particular area, but the plan now is to get the rest of the region up to that level and progress that plan further. Until we have all that data in front of us regarding water and soil salinities, distributions, the identification of the worst affected areas and the possible best bet options to treat these problems, we really cannot strike a blow. In 12 months time I think we will have a fairly good handle on that, because most of that will be on a database that is useable.

Mr ADAMS—There is a need to gather data, is there not?

Mr Clark—Absolutely.

Mr ADAMS—Would you agree that it takes a lot of gathering of information?

Because we are in a new era in that sense, gathering information and seeing in your region that some people are trying new things is quite interesting. Do you agree that it takes some time to get the information needed to make decisions?

Ms Jenkins—It should not be at the cost of doing something, though.

Mr Clark—The problem in the past has been that there have been X number of dollars available. A huge majority of that money has been spent on planning and soaked up in the bureaucratic system. We still have to have planning, but we want the majority of the money spent on the ground to fix the job.

Senator MURPHY—In that economic paper you say that there is an assessment. What costs have you actually assessed?

Mr Clark—There is a variety of assumptions.

Mr Marsh—Do you mean the actual cost of doing it?

Senator MURPHY—Yes.

Ms Jenkins—Would you like a copy of the report?

Senator MURPHY—Yes. We should have a copy of that.

Mr Marsh—It was about \$2,800, or something.

Mr Clark—That was done by the chief economist of New South Wales land and water.

Mr Marsh—It was probably subsidised because I think it was one of the first ones done. It was a pilot.

Senator MURPHY—Does it suggest the cost of repairing the damage?

CHAIRMAN—Or is that just the cost of the assessment?

Mr Marsh—No, that is just the cost of the assessment—to produce that.

Mr Clark—The cost of repairing it is included in the cost benefit.

Mr ADAMS—Will you submit that to us?

Mr Clark—Yes.

Mr Curlewis—I would like to see whether I could answer Mr Tuckey's question as to whether we understand the problem and whether the problem is being met. Included in the answer would be a question as to whether Landcare may be an appropriate way in which we as a region should attack the problem. It might be useful to understand how our small group of 21-odd landholders in the small catchment approached this problem some three to four years ago. I think it started following Boorowa's efforts to produce more vegetation and to understand a bit more about the salinity problems that were appearing in the area.

A few of us recognised that on our own properties we had small areas of scorched earth where salt had appeared. We understood that they were saline areas. From a very small understanding of areas maybe not much bigger than this room—the largest area in our whole catchment would be the size of a tennis court—we then set about looking at it more thoroughly. We identified the areas and then tried to interest our 21 landholders in joining a group. That was met by some people saying, 'Look, mate, I've been taking care of my land for the last 50 or 60 years. You can't tell me anything about land care.' That was the initial approach.

Now, some four years later, every one of those 21 landholders is a member of the Landcare group. I think all of them have had some degree of funding. All of them are thoroughly committed to the idea of improving and increasing vegetation on their properties and attacking this problem of salinity. I suppose there have been two effects of a very small start to that. We are now seeing quite a degree of planning going into the examination of the hydro-geological areas—the geology of the area. We are having that mapped, and we are having individuals map their own properties for salinity areas. We then look at ways to combat the salinity areas by increasing vegetation, maybe altering farming practices or having lesser rates of stocking.

Everyone is now adopting that sort of approach. I see it as an incredibly effective tool of local communities participating in the problem of redressing the degradation that is there. We have moved from the small start of knowing that there were small areas of salinity. With the release of the report only last week from the Murray-Darling Commission, we understand that the problem is far greater than we first thought. I think our efforts will have to be redoubled. But, if the approach of our small group can be multiplied by the region and then by the whole of the state, I see it being a very effective way of attempting to redress the problem.

Senator MURPHY—Is it not also true that, in terms of redoubling your efforts, it has been pointed out not just by people from this region that the financial viability of being able to do that is critical?

Mr Curlewis—Absolutely.

Senator MURPHY—From what I have quickly gleaned from this report, you are

behind the eight ball as it is.

Mr Curlewis—Yes.

Senator MURPHY—The percentage of ground that is affected has been identified as some 1,00-odd hectares.

Mr Curlewis—Yes.

Senator MURPHY—There is potential for a 0 per cent increase. It would appear, from what I have witnessed today, that it is being dealt with at a rate slower than that by which the problem is increasing.

Mr Clark—That is a worst case scenario.

Mr Marsh—The size of the salt affected area has been estimated to have a ceiling of about 10,000 hectares if you do nothing. It is not exponential growth—30 per cent a year until you get the whole catchment salinised. But it is certainly a significant problem. We are not saying that it is not. We are very concerned about it. As Ian has said, one of the good things here is that we have begun to act.

There are other catchments that have serious problems, and they are perhaps considered to be more valuable agriculturally than this area. In those catchments a lot of money has been spent on planning and no acts have taken place yet. They have spent a lot of money on planning. Ultimately, when they begin to act, they may do great things. But our feeling has always been that, if you wait until you have the total theoretical answer, you will be that far behind that you will never catch up. You have to begin acting. That is the way we have approached it.

Senator MURPHY—With regard to the work that you have done on some of the properties, has there been any other or further research work done with regard to the salinity content in the watertable; that is, in Illyria? Has there been any work done following that—

Mr Clark—There is a network of ground water monitoring in place so we can monitor catchment health over time. As the program proceeds through time, hopefully we will start to get a handle on whether we are having an effect on the problem and adjust or modify our activities accordingly.

Senator MURPHY—In terms of the salinity problem that is there on this property, fixed as a surface problem, if you like, is the saline content of the water the same, only that the watertable has just been pushed down a little bit by the fact that you have grasses and other types of pasture growing there? I am just wondering whether or not the salt flow is still there and whether it ultimately ends up in the river and then into the lake.

Mr Clark—You are looking at surface flow versus ground water flow.

Senator MURPHY—Yes.

Mr Clark—You can get hydrogeologists to sit here and argue with you all day about—

Senator MURPHY—I do not want to argue.

Mr Clark—We are looking at kilograms of salt in the river. It does not matter whether they get there off the top or from underground. That is the bottom line. By reducing surface flow, you are going to cut back a hell of a lot of that dissolved salt entering the surface water flow system. That is the aim of all this surface vegetation. We are not going to have a big effect on those underground systems initially.

Mr ADAMS—You want to take the water off.

Mr Clark—Yes.

Mr Marsh—We want to use the water that falls from the sky—where it is.

Mr Clark—We want to use the water where it is; where it falls.

CHAIRMAN—That was salinity. We will have to close this set of witnesses in a minute. It seems that the focus here has been all on agricultural type solutions, using plants to soak up the water. Whereas, in my own electorate, engineering solutions have been very high on the list with interceptor banks, and particularly the excavating of old creek beds, to get drainage of that ground, which of course would discharge down into your river. But we have discovered over a couple of years that that water turns fresh. What is your view? In any of your planning, have you looked at engineering solutions along with the other solutions?

Mr Clark—We have looked at ground water pumping in the early days but, because of the actual salinity of the ground water in this area, it would have a devastating effect on the actual salt content of the tributaries coming out of the catchment. That would actually have the reverse effect. If you have fresh ground water systems, you can pump the hell out of them. But, if you have high levels of salinity in your ground water, it is a major problem. You are probably better off to keep them where they are.

CHAIRMAN—I think you would want to go and have a look at what has been achieved there. That is the initial situation. Pumping is an expensive way to do it, of course. There are other ways.

Mr Marsh—Yes.

Mr Clark—Yes. Further down the catchment, they are obviously using salt pans. They are pumping those saline ground waters into salt pans and evapotranspiration pans. There are a lot of different ways of handling that sort of ground water. We have not looked at the engineering solutions at this stage. We would rather look at—

Mr Curlewis—I think the only engineering solutions we have had are to slow down the flow of water on the surface.

Mr Clark—Yes.

Mr ADAMS—Where the salt actually is, that has not been established by—

Mr Clark—Keep the salt down; keep it in the soil. Keep it where it is—just keep it out of the system. I guess that is the method we are using.

Ms Jenkins—The situation here is a bit different. The whole area is saline because of the nature of the rock, particularly in the eastern side. It is not a case of having hot spots of salt deposits like old salt beds covered up. It is not the case here. It is actually salty the whole way through, so you do not have point sources of diffused source. For that reason, you cannot really isolate it. You have to actually deal with the whole area.

Mr ADAMS—Ms Jenkins, with regard to evidence that was given on your education program, is it the case that you have, as land care groups, gone into schools and that there are people from the townships involved as well as—

Ms Jenkins—Council.

Mr ADAMS—Council is involved? Is that so?

Ms Jenkins—Yes, it is so. Schools are involved and there is a local council representative on the regional committee.

Mr ADAMS—What is the percentage of landowners in the area who are members of the various groups? Can you give us a rough ballpark figure?

Mr Clark—We are in a state of flux because we have just regionalised, and the mapping is not up to—

Mr ADAMS—Are you touching 50 per cent or—

Mr Clark—Easily.

Ms Jenkins—Easily, yes.

Mr Curlewis—It would be greater than 50 per cent by area, wouldn't it?

Mr Marsh—I would think that there are only two insignificant farms outside our group. It is virtually 98 per cent.

Mr Clark—There is a very high participation rate. In fact, the land care movement has probably been far more effective than governments ever realised it would be. They have possibly created a monster in a way, because there is so much enthusiasm for the philosophies of land care by farmers that it has created an institution which, when it gets to a point in planning, then stalls for the lack of catalytic or strategic funding. I think that is a huge problem that Landcare will have to face in the next few years.

CHAIRMAN—This is expenditure on private property?

Mr Marsh—Yes.

Mr Clark—For public good, I would say.

CHAIRMAN—Yes. I am not arguing about that. I just wanted you to put that on the record. The reality is that it is an issue where you would see some dollar for dollar—dollar for two dollars or whatever—funding.

Ms Jenkins—That is the situation, yes.

Mr Clark—That has already been addressed.

Mr Curlewis—That has been the aspect upon which we have sought funding. It has been more like two land-holder dollars to one funded dollar. There has already been hundreds of thousands of land-holders' money spent in the last few years in increasing vegetation to combat the degradation and salinity problems.

CHAIRMAN—Mr Veness, Mr Southwell and Mr Dunstan, thank you for your cooperation this morning in accompanying us and giving us examples on your own properties. So appreciative of that were we that we wanted to make sure that some of your statements of this morning go on the official record.

Mr Veness—I have been involved with land care ever since we started in our area and began planting trees probably before Landcare started because of our property being burnt out in 1978. A lot of the trees that were left were burnt. The property was overcleared, and we were having trouble because it is a very cold windswept place. So we began planting tree breaks or windbreaks. Then, when Landcare came to the fore, we attempted to put the windbreaks where we thought that they would intercept the water in the watertable and so reduce the watertable.

Our property has a lot of saline scalded areas—or it did have—and we felt that we would have to address these problems. So, out there, we concentrated on these saline areas more so than what most of the Boorowa area was doing—they were looking up the hills a bit more—to combat the cause of it. We felt that, if we could get some cover on these scalded areas so that the evaporation was not so great, the salt would not be brought to the surface and flow into the streams. So we fenced these areas off and planted trees, tall wheat grasses, puccinellia and different types of grasses so that we could get some cover.

We feel what we have done has been reasonably successful. We probably have not got to the cause of the problem, but I guess we have done a bandaid job on it and have stopped the salt from coming to the surface. If you have a look at the rocks out there in the cuttings, the country is loaded with salt underneath. We see it as fairly important to try to keep that salt down there. We have piezometers in place to measure the salt content and also the watertable. Some of our piezometers read at about 4,000 parts per million. We have planted 12,000 trees in tubes and have done a small amount of direct seeding.

We now have to look at sowing better pastures. We feel that we have tree breaks in most paddocks. We certainly do not have enough, but we have to look at planning pastures to use up the water. I think this is where the problem is going to start. It is very expensive to do this, and up till now we have been getting funds from Landcare for mapping and planning. We have also received a certain amount of funds to do small trial plots and demonstration plots. Now that we have gone through that period, and if we are going to have an impact on what is happening downstream with the water quality, we have to be able to access funds from somewhere—and they are big funds—to redress the problem. In today's economic situation, they are far beyond land-holders' means to be able to do these sort of things.

There are a lot of funds available in Landcare, but the way I see it is that they are funds to fund somebody to come and do a survey—which I agree we have to have done. We have to know what is going on, but we have also got to have those funds for on-ground works. You can have all the surveys you want but, until you have it on the ground, you have not really done anything. This is the stage that our Landcare is up to at the moment I think. We have to have funds from somewhere to start implementing what we know should be done.

I would like to comment on what David said about sustainability of the land. Sustainability is more than just caring for the land. There is the human side of it. Because of the economic position of the land and the lack of funds, not many of the next generation are going to stay on the land. Unless incomes improve greatly, we are not going to sustain the work force and the next generation that should be on the land will not be there. That is all I have to say.

CHAIRMAN—Fine.

Senator MURPHY—I want to ask Andrew a question with regard to some of the things that were in two of the papers that we have.

CHAIRMAN—We will deal with Ron first and then we will get Andrew to make his introduction. If there is no particular question for Ron, would you, Andrew, like to re-tell us some of the issues you told us this morning?

Mr Southwell—Before I begin, is the paper that I gave you going to be—

Mr ADAMS—It has been authorised.

CHAIRMAN—You are down on the public record.

Mr Southwell—First of all, I would like to say thanks for the opportunity—

Senator MURPHY—If you want to change it, you had better do so now.

Mr Southwell—Everything is changeable, isn't it? Every theory is only a theory. One thing I do like about the United Nations convention on desertification is that it is from the ground up—from the land-holders and the people who live on the land up. This is our opportunity to have a say on it, so that is good. As I said today, I have a few theories. They are not really my theories; they are the theories of people like Allan Savory from the Holistic Resource Management and Tim Flannery, who is a senior scientist with the Australian Museum, regarding how desertification is an issue for us here as well.

I think desertification is caused by overgrazing and understocking occurring at the same time. Set stocking management means that our palatable grasses—our good grasses, as we call them—grow out first, leaving the poorer quality grasses. They then die and we are left with great masses of dry feed, as we are seeing at the moment. This causes shading, as we saw today. Then we do not get any production and we wonder why our sheep are hungry. It is not just a matter of lack of rainfall; it is the grazing systems that we have in place.

In the past—and I am talking about thousands of years ago—there were large herds of animals. In Africa, it was elephants and whatever. In India, it was large herds of sheep and camels. In Australia, before the Aborigines, it was large herds of kangaroos, which are now extinct. The Aborigines killed them and they then had to use fire in its place. Fire still has its place in the ecosystem. We need to get back to something similar to that.

We are trying to do something similar in what we call a rotational grazing system: large mobs of sheep moving periodically across each paddock. The animal impact is important. The herd impact, as Allan Savory recalls it, is important. It allows young grasses to germinate and to establish before the sheep go back onto them. I see that there are lots of things in that whole area. It is just a new way of thinking—for many of us,

anyway—about our grazing system.

We have got rid of all the large herds, we have put up fences and we have got rid of the predators. In Africa, you can hardly find the lion. You cannot find the tiger in India anymore. Here, man no longer is a predator of the kangaroo and so they no longer move across the landscape in large numbers like they used to. We need to get back to that.

I have written in there that I cannot talk to the Africans, but my understanding is that they have one cow and one goat and they live on their little half hectare. Why not put 180 farmers together with their 180 cows? Then they only have to live on each half hectare for two days a year, grazing around for 365 days of the year. I believe that would make it a healthier system.

Basically, that is the same sort of concept that we are trying on our place. We have found that it is improving our pasture. Our saline areas possibly still are saline, if you measure the salinity of the water. But the grasses are back on those areas. There are very few scalded areas now. So the grass, if it is growing there, is using the water and getting a better water cycle and a better mineral cycle—all the things that Allan Savory talks about.

I have listed there some of the other things I think we do need to look at, such as some sort of perennial grain crops. The country west of us is ploughed nearly every year; they put in a crop to strip. Why can't we develop perennial wheat, perennial barley, et cetera? With all the genetics and all the technology we have today, surely we can come up with something like that.

We need to be looking also at perennial legumes, particularly for southern Australia. There are perennial legumes for tropical Australia but not for southern Australia, except for white clover which has its limitations in the drier areas. We need to be looking at that. We have talked about others.

We have talked about the economy. Basically, farmers are living below the poverty line. When you look at the amount of money we have invested in land and equipment, and the skills that are required to manage a biological system, we are not getting paid anything like enough for our produce. The same applies in every other country in the world. The farmer, nearly without exception, lives below the poverty line in this country. We have to start paying our farmers, our primary producers, for what they produce, otherwise we will be in serious trouble.

Lastly, I would say that I think the Australian government needs to be very careful before it ratifies this convention on desertification. From my reading of it, they just want us to lock up land—and that is exactly the wrong thing to do. Locking up land only makes it worse. You only have to go to Kosciusko National Park to see the St Johns wart, the blackberries and the feral pigs and feral cats. They are all part of our heritage areas. It is a disgrace. I think we need to think seriously before signing the United Nations Convention

to Combat Desertification.

Senator MURPHY—With regard to the document of February 18 that you put together, I was curious about statements you made about saline. On page 2, section 2, it reads:

2) Saline Paddocks have a higher carrying capacity.

Mr Southwell—Yes.

Senator MURPHY—I know you do qualify that due to moisture, but that is an interesting view. How do we deal with that, given the other problems of salinity?

Mr Southwell—Yes. I think when salinity has gone too far and the country becomes scalded and bare, yes, salinity has a major impact on productivity. But when you can keep the grasses on your saline paddocks and graze them the right way, we have found that they actually have a higher carrying capacity, particularly this time of the year. Looking at most people's places at the moment, the sheep are probably grazing on the saline areas because that is where the green grass is. Yes, I stand by that statement. On our property, under our system, that is what is occurring.

Senator MURPHY—This question probably can be answered by the land care group in writing. What percentage of farm income currently is being spent by landowners on land care programs? I ask that because, in this document *Boorowa & Rye Park Landcare Groups: Working for a healthy land*, it says that your gross value of rural production for the shire in 1991 was \$36 million. Then you have a proposed solution, or a user costing for solving the problem, of \$50 million over a 10-year period, \$5 million per year.

I am trying to get some understanding about, if it were to be funded, what capacity there would be to fund it and what might be needed, if you like, from external funding—that is, from the public purse. At the end of the day governments, if they are considering obligations from an international point of view, have to have an understanding.

The proposed convention does cite economic considerations as part of it, and it would be helpful to us to understand at the moment what is being spent as a level of farm income. Perhaps people might even be prepared to provide, on the basis of that \$50 million, what level of farm income—and given that I understand fully the economic situation of most farmers—would be needed to make a contribution that might get you somewhere near that sort of solution.

Mr Dunstan—Could we give a written submission and talk about that?

Mr Southwell—Are you talking about gross farm income?

Senator MURPHY—Perhaps it would be good if you could put it down. It is an important factor when you come to deal with this sort of problem.

Mr Veness—A lot of the landholders contribution towards the land care projects is not in cash; it is in kind.

Senator MURPHY—You can make some assessment of that.

Mr Dunstan—I can put an entire value on it, but it is in kind, in hours or—

Mr Veness—It is not money out of the landowner's pocket.

Senator MURPHY—At the end of the day, it is.

Mr Veness—It is, but it is not actually finding it in that case. There are two separate sorts of things: your time and your wages, plus the money you need to buy the seed, et cetera.

Senator MURPHY—What I would like to understand is that, if you are proposing a solution of \$50 million over 10 years at \$5 million a year, at the end of the day we have to determine how we can raise that. Yes, there will be some in-kind effort, but it all has to be quantified to some degree because that cost is based on in-kind effort. It is \$5 million worth; it is not \$5 million worth of trees and just stick them in the ground.

Mr Veness—Janelle would probably know how much we have applied for in funding this year.

Ms Jenkins—I can give you a breakdown based upon what was applied for by the six Landcare groups in this region for 1997-98. I can tell you exactly what they asked for and what you will get for that money in hectares and kilometres of trees, or whatever. Also, I can tell you what the landholder contribution will be for those funding applications. Is that the sort of thing you require?

Senator MURPHY—Can we do that, in so far as we require a solution—and I would assume that it is in that economic assessment that you have done; that this is where this has been drawn from?

Mr Dunstan—That predates the economic analysis by a long time.

Mr Clark—That is probably very early days.

Senator MURPHY—Is it possible to get a more up-to-date version?

Mr Clark—The cost benefit that was just recently performed is the most recent

economic data we have got.

Senator MURPHY—Janelle and Roger, or the Landcare group or groups, to enable governments to understand what is required, it would be helpful to have some sort of breakdown of that. I accept the criticism that has been made earlier, that it always seems to be that not enough dollars get to on-ground works. If that is a problem we are to overcome, then we have to have some information—certainly from my point of view—to argue a case.

Ms Jenkins—I would ask you a question then: what is your ultimate outcome? Do you want to keep salinity at the level it is at the moment, or do you want to reverse it? Do you want economics on one of those and, if so, which one?

Senator MURPHY—Again, that is why I asked the question earlier. I do not know whether your salinity problem going into, say, the Lachlan River is aboveground saline increase, or is it still going through in ground water?

Ms Jenkins—Ray Evans would be the person to talk to, to give you that sort of detailed information.

Senator MURPHY—So I cannot answer your question really.

Ms Jenkins—Yes.

CHAIRMAN—I think you have to look at that in the terms of the treaty. In reporting to government, we have to say that at various levels of activity to which you are committing in this document the cost could be. We will go to your lands department and your conservation people and they will give us some state-wide estimate. But it is not a bad test—and I think this is what Senator Murphy is getting at—that, where we are able, we pick up a local estimate per farming property of what is needed to recover the situation of 10 years ago, or whatever.

Ms Jenkins—We can do that, but it would only be an estimate—

CHAIRMAN—We accept that.

Ms Jenkins—and an estimate on a farm basis, with a certain level of salinity.

Senator MURPHY—No. Within your region you have your latest cost benefit analysis and—I assume, not dissimilar to what is in here—what you can do to fix the problem, to take it back, if you like, to a point in time, whatever that point in time is. You can provide that with a cost assessment on a per farm basis. Obviously, some farms will be different from others because of the problems and the size, et cetera. But we just want to have a look at it from that point of view because the treaty or the convention does

relate back down to that level.

Ms Jenkins—To dollars?

Senator MURPHY—It is an obligation on a landowner.

Mr Veness—I think our land care application this year was just under \$1 million—that is, for the Boorowa catchment, which includes about six Landcare groups. Our application for funding I think is \$800,000-odd.

Ms Jenkins—It is \$800,000.

Mr Veness—So the landholders' contribution would be similar because it is, I think, mostly worked out on a fifty-fifty basis. Some have worked it on a two-thirds, one-third basis. But that is a pretty conservative sort of a figure. A lot more money than that would be used each year if money were there for the landholder. If the economics of the farm were better, the landholders would put in more. So it is really based on what the landholder can fund, but it is looking at around \$1 million.

CHAIRMAN—I do not think we are really talking about who should contribute what. Let us say that you had a 10-year program. I think somewhere this morning, somebody said, 'Ten years ago, this grass grew and that grass grew, and then we really didn't have a problem.' If ten years is far enough back, and you wanted to achieve the circumstances that existed in this district 10 years ago, and you had 10 years in which to do it, how much a year, either per property or per district, is your estimate of the cost, irrespective of whether it is through the efforts of a farmer and their financial resources or outside resources? It still comes down to a cost of which you might say the rural sector can only afford a third, or whatever.

Plus, remember that when you count a farmer's time—as they say with money—there is a thing called 'opportunity cost'. If you have it all tied up in your farm, you do not have it in the bank earning seven per cent, or whatever they will pay you these days. It is the same with your labour. It is easy to say that it does not cost you anything. But if you went and took a job, say, on a mine, as many of my farmers do, you would earn \$1,000 a week.

Senator MURPHY—If you were here today arguing to us that you needed \$50 million and I said, 'Why; on what basis are you saying to me that you need \$50 million?' I would want some explanation.

Mr Clark—Could I just perhaps help clarify that point? What we are using to address the situation at the moment are best bet options that we have evolved. They are the best bets we have been able to derive from all the data, the research, the hard sciences, to date. At the moment the very latest data we are getting, and the data we based our cost

benefit analysis on, is data to stabilise the recharge situation. You probably will have to plant 30 per cent of the catchment to forestry of some description. That was the figure we used. That is very pre-dated.

Senator MURPHY—It has 20 per cent in here.

Mr Clark—It has gone up 10 per cent since the publication. They have been doing a lot of computer modelling addressing recharge and rates of recharge and discharge. We had no results from that sort of work then, and now we are getting results from some of that sort of research that is happening. So that is why the 30 per cent figure was used in that cost benefit analysis, and that is the figure we are looking at.

Senator MURPHY—And that is stabilisation.

Mr Clark—That is not reversal. That is probably to salvage the situation. That is the sort of thing we will do budgets on.

CHAIRMAN—That is the sort of submission that we would like to receive at a later date.

Mr Clark—That sort of on-ground work goes nowhere near those sorts of levels of reforestation.

CHAIRMAN—Please try to make some rule of thumb estimate. As I said, we will seek advice from state organisations and others in a similar way. But it just gives us some idea of what people on the ground think, compared with what the state bureaucracy might think.

Mr Clark—Obviously, to make that 30 per cent of revegetation work, we have to have a farm management system in place whereby a level of profitability can be obtained from that to make it actually work in order to make a catalytic type funding set-up so that it can be self-sustaining.

Senator MURPHY—When you do that sort of assessment—because I was curious about the 20 per cent—could you please include in it what impact going back to reforestation 30 per cent of your land would have in terms of farm economies and finances of the people on the land.

Mr Clark—That is where you have to look at partnerships and trade-offs.

CHAIRMAN—And maybe some engineering solutions.

Mr Clark—Possibly.

Mr Southwell—They are environmentally unpalatable at the moment.

CHAIRMAN—As I said, I think you should send some of your environmental bureaucrats over to Western Australia to see how it has had a positive effect on water flows and things. They are the sorts of options there are. But there is still a substantial cost, and it is that with which we are concerned.

I have seen a lot of property in my electorate sold for the purpose of tree production. But the effect of that on little towns like this is unbelievable: the trees are planted, and then everybody walks away from that property; the school bus does not stop; there are no deliveries of fertiliser, nor is there the taking away of stock. Suddenly your town effort really drops off.

Just before we close and remembering who else has attended, do any members sitting behind the front group of witnesses have any special representation they would like to make to us? As there are no special representations, on behalf of my colleagues I would like to thank all those who have been involved in today's activities. We have learnt a great deal from the work of the various Landcare organisations in the area. We are grateful for the time you have given us.

When the witnesses have had a chance to look at the draft *Hansard* of today's proceedings—and they will get a full transcript—the transcript of evidence will be available. If anyone would like more information, please contact the secretariat. I now need from my colleagues a motion to authorise publication of the evidence.

Resolved (on motion by Mr Adams):

That this committee authorises publication of the evidence given before it at public hearing this day.

Committee adjourned at 2.35 p.m.