

The Contribution of Radio Broadcasting to the Millennium Development Goals in Southern Madagascar

Summary Report

of a study of the Andrew Lees' Trust 'Projet Radio'

by

Leo Metcalf, Nicola Harford and Mary Myers



Funded by DFID

January 2007



This summary draws on the following research reports:

Harford, N., 2005 *ALT Project Radio Monitoring and Evaluation Consultancy – Report of Briefing Visit* ALT: London and Madagascar

Harford, N., 2006 *Survey of Partners for Communication and Information for Development (PCID)* ALT: London & Madagascar

Johansson, S., 2005 *Ejeda Evaluation Study* ALT: London & Madagascar

Lellelid, S., 2005 *ALT Projet Radio: The Status of Associated Radio Stations of South Madagascar* ALT: London & Madagascar

Lellelid, S., 2006 *Literacy Evaluation Study Report* ALT: London & Madagascar

Metcalf, L., 2005 *Assessment of Phase II of Project ‘Radio SIDA’* ALT: London & Madagascar

Metcalf, L., 2006 a. *Research on the Impact of Projet Radio on Poverty Reduction in the Androy Region* ALT: London & Madagascar

Metcalf, L., 2006 b. *Research on the Andrew Lee’s Trust’s Communication Support to Fuel Efficient Stove Projects* ALT: London and Madagascar

Metcalf, L., 2006 c. *Research on the Andrew Lee’s Trust’s Communication Work for the Project for the Support of Rural Development (PSDR)* ALT: London & Madagascar

Metcalf, L., 2006 d. *Planting Trees And Sowing Sorghum: The Use of Radio by the Andrew Lees Trust’s Tree Nursery* ALT: London & Madagascar

Metcalf, L., 2006 e. *ALT’s Partnership with the SALFA Hospital in Ejeda: Further Research on Behavioural Outcomes* ALT: London & Madagascar

Metcalf, L. forthcoming *Manual for the Impact Evaluation of Radio Information and Communication for Development Projects* ALT: London & Madagascar

Orengo, Y., 2007 *Institutional Review of Andrew Lees Trust Projet Radio* ALT: London & Madagascar

Vadgama, J., 2006 *Survey of Listening Groups Established through ALT/PR in Madagascar* ALT: London & Madagascar

All maps and photos are courtesy of Andrew Lees Trust

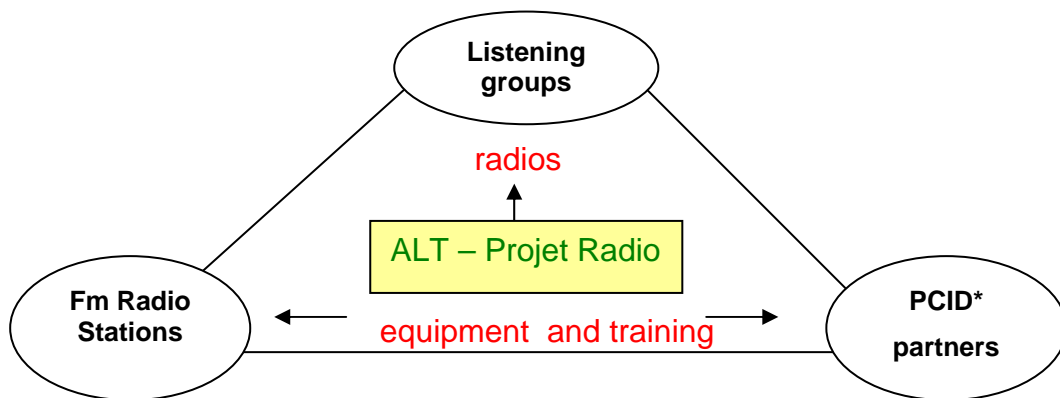
Andrew Lees Trust
c/ Warchild
5 Anglers Lane
London NW5 3DG
Tel: (44) 207 424 9256
E-mail: admin@andrewleestrust.org
www.andrewleestrust.org

Media Support Solutions Ltd
Ruadh Ard, North Kessock
Ross-shire, IV1 3YA
Scotland, UK
Tel: (44) 1463 731357
E-mail: info@mediasupport.org
www.mediasupport.org

Background

This is a summary of research by Metcalf, Harford and Myers on the Andrew Lees Trust 'Projet Radio' in Southern Madagascar (known henceforth as ALT/PR)¹. It was commissioned from Media Support Solutions Ltd by ALT/PR with funding from the Department for International Development (DFID) to generate a stronger evidence base for investment in Information and Communication for Development (ICD).

The Andrew Lees Trust (ALT) has been implementing an educational radio project known in French as *Projet Radio (PR)* in Madagascar since 1999. The project aims to empower isolated populations across the southern provinces of Tulear and, more recently, Fianarantsoa, to improve food security and reduce the effects of poverty through education delivered by radio (see map, back cover). PR does this through local radio stations, village listening groups and local service-providers (PCID partners*), reaching an audience of over 500,000. The three-way partnership can be seen below:



* Partners for Communications and Information for Development (PCID) rural communications network

PR's role is to train, provide materials, and facilitate a network between these three groups of stakeholders. The project is responsible for producing an average of 33 programmes per month; 1,540 programmes have been aired to date.

There are currently 49 PCID partners – local service-providers, both governmental and NGO. All affiliated radio stations are locally-based, community or commercial FM stations. Radio programmes are made in local dialects, using formats that are engaging and relevant. The process used - the Participative Production Cycle - gets as close as possible to the needs of the audience without villagers actually making the programmes themselves.

Funding has mainly been provided by the European Commission.

¹ See full report (82pp): Metcalf, L., Harford N., and Myers, M., January 2007 *The Contribution of Radio Broadcasting to the Achievement of the Millennium Development Goals in Southern Madagascar* Media Support and Andrew Lees Trust

Methodology of the Research

Eleven different research studies were done across Southern Madagascar between August 2005 and December 2006 by researchers independent of the project. Methodologies for each study are detailed in each research report and in Metcalf *et. al.* main report. In summary, a range of methods were used, depending on the topic: from questionnaire-based interviewing of large random samples of up to 273 people, to small focus-groups, participative mapping, and interviews with key informants. The researchers also reviewed other project documents, and had extensive discussions with project staff to reach an independent assessment of the institutional aspects of the project.

How Radio is Helping to Meet the MDGs

ALT/PR has tackled the following Millennium Development Goals (MDGs) by using radio strategically to enhance the on-the-ground work of local service-providers.

Extreme Poverty and Hunger (MDG1)

Madagascar is a Least Developed Country, with a population of approx. 18 million people (2005). It ranks 143rd out of 177 countries in the UN's Human Development Index. 85% of the Malagasy population live on less than \$2 a day, and the situation is particularly bad in the south, which is affected by regular drought and chronic food insecurity.

ALT/PR and its partners have so far produced over 400 radio programmes specifically on this MDG topic. Subjects range from controlling diseases in livestock, to improved techniques for rice-planting, to advice on laws and rights, loans, fishing and bee-keeping.

In one of the larger studies, the team compared five villages with non-existent or very low radio access, and six villages with good access to a radio signal (268 randomly selected respondents). Both sets of villages were otherwise identical in socio-economic terms.

Findings on Poverty and Livelihoods

It was found that women were particularly influenced by radio, whereas men had access to other information sources, such as word of mouth, because of their greater mobility. In the question: 'Where do you get your information about agricultural matters?' radio was the clear winner in radio villages (50% mentioned radio, 39% mentioned 'word of mouth'), whereas in non-radio villages, important men or notables were the main source (53%) with 'word of mouth' mentioned second (40%), 'friends and neighbours' (38%) third, and radio mentioned only by 22% of villagers with low access to radio (n = 134).

In the same area, 80 members of eight listening-groups were asked whether they had been able to implement actions that the radio advised. These respondents – both women and men – had been regular listeners to the radio for at least four years (since 2002). Three out of eight groups had built windbreaks to protect cotton fields; three groups had used insecticides to protect their crops; four had tried to follow radio-advice on grafting manioc

and three had planted sorghum. The majority claimed they now used 'modern agricultural techniques.'

Four out of eight groups said they now vaccinated their cows; three groups said they take cows to the vet when they are sick; and two groups said they treated cows with traditional plants such as periwinkle.

We now do vaccination of cows in our village and take them for treatment with the vet when they have problems, thanks to following advice and information from the radio (Focus Group in Ankara-mena, Androy area)

On rice-growing, another group was quite clear about the value of radio:

We practice rice plant thinning at eight days, and now production has increased thanks to the radio (Focus Group in Fort Dauphin area)

Three out of this sample of eight groups had created an association which can – among other things – apply to receive funds from local development projects.

A survey of 28 of ALT/PR's 34 partner organisations in Tulear Province was conducted, along with an audit of 15 of ALT/PR's partner radio stations. Few partners had engaged in radio related communications prior to joining the PCID. Now, 49 NGOs and governmental service-providers across the south of Madagascar are able to expand their coverage, by up to 50%, through transmission of information and education, which they simply could not do on the ground due to limited staff, transport and time.

Gender Inequality (MDG3)

In Southern Madagascar, women have traditionally played a very secondary role in decision making. Their status is extremely subordinate to men's, and their inferior status has many negative consequences for their education, health, nutrition and life-prospects. Poverty has forced men to migrate away to work for long periods, leaving 25% of households headed by women².

ALT/PR has to some extent taken advantage of this gender pattern, and encourages communities to elect women as recipients of the project's clockwork radios, and as heads of listening groups. This is partly because women's more stable presence in the villages means that they are available to provide access to the radio for the listening group at the stated times.

Findings on Gender

The research found that women's inferior access to information, compared to men, has been greatly improved with the arrival of radio broadcasts. For example, during the research conducted in Ejeda, Mahafaly region, in 70 interviews with women attending hospital there, the most important reason give by respondents as to why they considered radio a good source of information was that it was easily accessible.

² World Food Programme 2006 *Madagascar: comprehensive Food Security and Vulnerability Analysis (CFSVA)* UN WFP: Rome

At present, the percentage of female heads of project listening groups stands at 68%, and the listening-groups are an important gathering point for women (though they are open to both men and women).

Mother and Child Health Problems (MDGs 4&5)

In Madagascar approximately 160 children die each day due to malaria, diarrhoea or respiratory problems caused by infections. In the south, health services are particularly bad with only 49% of women able to access and use skilled antenatal care³.

ALT/PR and its partners have produced a variety of radio programmes on such themes as child-hood diseases and hygiene, as well as on the advantages of pre-natal consultations, of vaccination, exclusive breast-feeding and family planning.

Findings on Mother and Child Health

134 women were asked about their knowledge of ways to avoid pregnancy. The research found that women from villages with good radio reception were more knowledgeable about all types of family planning methods than those from villages with low radio listening – and the sample was controlled for the effects of age, distance from a clinic, or the possible effect of field agents promoting family planning. For example 46% of the former knew about contraceptive pills compared to only 18% in the latter.

**Women and Children
– Southern Madagascar**



The research found that 89% of women from villages with radio had vaccinated their children, compared to only 75% of those from villages with low radio-listening. Significantly more women from radio villages (68%) knew that a child needs a total of five vaccinations, compared to women in non-radio villages (42%). All villages had equal access to vaccination services, and were visited equally by health-workers publicizing vaccination.

The team's survey of 100 listening-groups found that health ideas from radio programmes were reportedly being put into practice by almost all of them, with the use of mosquito nets coming out top (46 out of 173 practices mentioned), followed by use of condoms (32 mentions), take-up of family planning measures such as injections and pills (31 mentions) and prenatal and neonatal care (25 mentions).

³ *Ibid*

Thanks to advice from the radio, the incidence of all diseases has been reduced here in Tsarapioky because we follow all of the advice: vaccination for pregnant mothers and infants, use of 'super-moustiquaires' [mosquito nets] for protection against malaria, use of WC, protection of water for consumption' (Focus Group in Ambovombe area)

In research conducted at a hospital in Ejeda, more than 250 people participated in semi-structured interviews, and focus group discussions. Half of this sample were drawn from listening groups and half were randomly selected individuals outside listening groups. Researchers also looked at hospital records and conducted 70 exit interviews to obtain a picture of whether the new radio station had made a difference to the take-up of hospital services.

This study found that 75% of all respondents (both within and outside listening groups) cited the radio as their main source of information ($n=250$). 70% of the women at the Ejeda hospital for prenatal consultations mentioned radio as a source of information ($n=41$).

HIV/AIDS (MDG 6)

The latest study carried out in Madagascar between May and July 2003 demonstrates the prevalence rate amongst pregnant women is 1.1%. This indicates that the epidemic has entered a dangerous phase and threatens to spread within the general population⁴.

The team analysed the impact of a specially-commissioned series of radio programmes on HIV/AIDS broadcast between 2004 and 2005, covering a variety of HIV/AIDS awareness themes.

A two-month-long questionnaire-based enquiry was carried out which targeted 270 randomly selected individual interviewees (122 women and 148 men), and 27 focus groups. Respondents were selected to represent a cross-section of rural and urban dwellers, with roughly equal numbers of people who claimed to be members of radio listening-groups, and non-members. Respondents were asked to list their personal sources of information about HIV/AIDS in order of importance.

Findings on HIV/AIDS

It was found that radio emerged a clear top, with an average of 89% of respondents ($n=270$) giving radio as their most important source of information about HIV/AIDS. In second and third place came 'NGOs' and 'Posters'. There were slightly more urban respondents quoting radio as their main source than rural respondents (96% to 82%), and television was a notable influence for urbanites. But in both rural and urban areas, radio was the clear winner, in terms of information provision on HIV/AIDS.

Only 18% of respondents could not remember who produced the programmes, with an average of 75% of rural respondents quoting ALT or PR as the organisation that produced the programmes that they remembered. Programmes were so memorable that, in several cases, members of focus groups could repeat dialogues from the radio series, almost word for word, or could recite whole poems previously broadcast.

The survey revealed that the majority of both urban and rural dwellers were well-aware of the fatal nature of AIDS and of modes of transmission. 85% of the sample could quote AIDS

⁴ Malagasy Ministry of Health, 2003

as a disease, of which 60% said it was a sexual disease, 52% said it was incurable, and 58% said that it could lead to death.

Since these programmes were broadcast, we have come to believe in the existence of AIDS and we are afraid of it. (Focus Group in Ranomafano, Anosy area)

However, a small but significant minority (10%) of the sample stated *that AIDS does not exist*, and 15% of the sample believed that mosquitoes could spread the virus.

Environmental Degradation (MDG 7)

Known for its lemurs and baobab trees, Madagascar's natural environment is a unique asset, but is increasingly under threat. Perhaps the most immediate environmental problem in the south is deforestation and the fact that it exacerbates drought. There are various government and NGO conservation initiatives. For example, fuel-efficient wood-stoves, or *Toko-Mitsitsy* (TM), are made from clay and ashes and can cut fuel consumption by up to 75%. ALT has introduced them as a simple and affordable way to reduce the cutting of trees for fuel-wood.



Arid landscape of Southern Madagascar

In addition, ALT has been encouraging tree-planting through a tree nursery (6000-seedling capacity). The aim is to grow seedlings of useful drought-resistant trees. Seedlings are sold at affordable prices to individuals or distributed free to associations.

Between 1999 and 2006, a total of 354 programmes were made by different PCID partners on the environment: topics included the promotion of TM stoves and tree-planting as well as the dangers of slash and burn agriculture and the protection of tortoises (among others).

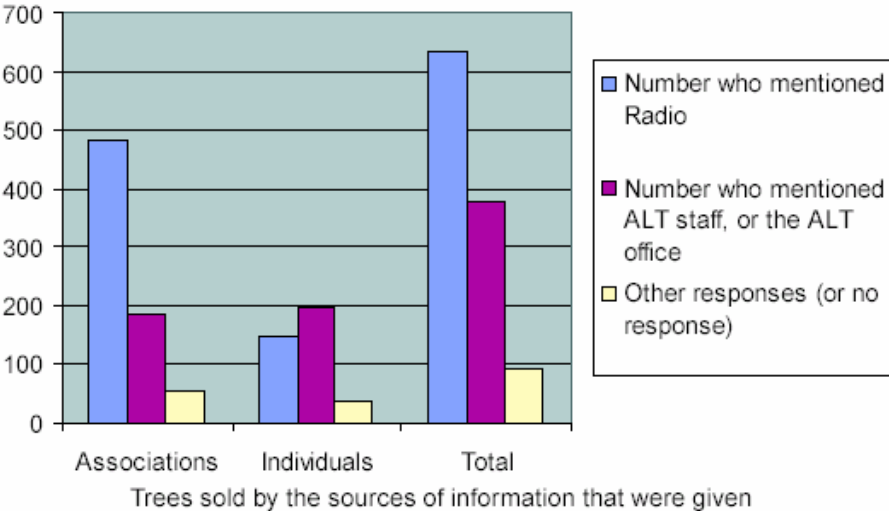
Findings on Environmental Issues

The team's research on TM stoves involved a survey of 268 randomly selected respondents in 11 rural communities. Findings from this sample (total number of women in random interviews = 134) show that 61% of women respondents from radio villages understood and were using an improved stove, compared to only 47% of women respondents from non-radio villages, despite having been visited equally by field agents promoting the new stoves. According to field agents in the villages with radios the women were more willing and much less wary of adopting the stoves. In fact, once they heard a trainer was coming, they would often collect the materials needed in advance.

Women in a third set of villages with well-organised and regular radio-listening groups, functioning since 2002, showed even better results: 81% of a randomly selected sample of women from listening groups either use, or had some time in the past used, an improved stove ($n= 47$). This shows the added value of radio.

The team assessed the extent to which radio informed and encouraged people to purchase trees, or associations to apply for free trees, from the tree nursery. Beneficiaries were asked about how they knew that trees were available.

Results showed that of the 88 individuals or associations visiting the nursery to obtain tree seedlings, radio was responsible for 39% of total visits, while 48% had heard about trees directly from ALT staff they knew. However, radio was responsible for more trees actually purchased (or received free in the case of associations): 635 trees or 59% of all trees distributed were requested because of the radio announcements (see graph).



Poor Availability of Information (MDG 8): (Target 18 ‘Make available the benefits of new technologies, especially information and communications, in cooperation with the private sector.’)

Back in 1996, the World Bank wrote ‘The most striking features of poverty in Madagascar as identified by the poor are isolation and powerlessness. The poor lack the means of communications with all but their own immediate community’⁵.

For many years the media was heavily restricted, but now the press has been liberalised and, in 2006, the Ministry of Communications registered 244 radio stations, throughout Madagascar. Nevertheless, poverty and illiteracy still severely limit access to information, because many cannot afford to buy radios or batteries, and electricity is unknown outside the urban areas. Widespread illiteracy also severely limits the spread of the written press.

⁵ World Bank, 1996 *Madagascar Poverty Assessment: Part 1* 14044-MAG Population and Human Resources Division. World Bank: Africa Region

Findings on the Provision of Information

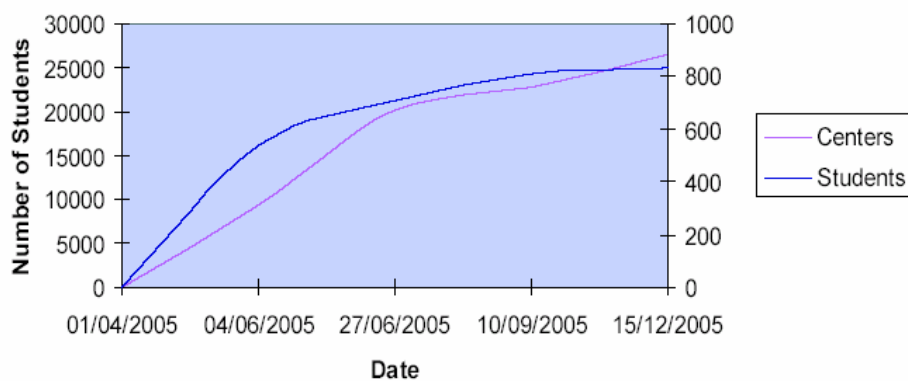
ALT/PR has taken advantage of the liberalisation of the media and has significantly improved access to information by launching two new rural radio stations, upgrading the signals for three, and improving the technical capacity of 17 stations. One third of the network stations have independently assisted each other in the last year with management advice, technical help or some sort of training or programme exchange. To date, none of the equipment exchanged with affiliate stations has been lost, sold, or gone missing. Through the provision of clockwork radios, ALT/PR has made a substantial difference to availability of information in, so far, 2,322 villages in the south.

In the team's survey of 100 listening groups, 25% said there was an association in the village that had been formed around the listening group, and 29% said an association existed in the village but independently of the ALT listening group.

When focus groups were asked about *fandrosoana*, or 'development', the literal translation being 'to move forwards' or 'to improve living', it became clear that administrative and social matters were as important to them as health, agriculture or education. For example, it is important to know how to obtain national identity cards, renew zebu passports, understand electoral lists, and to know the dates of funerals and circumcisions.

When respondents were asked about their motivation for joining radio listening groups, the value of information sharing was often seen as the 'biggest impact' of the project. The gaining of social capital by becoming a member of a radio listening group is significant.

Another benefit of radio-listening is gaining information about educational opportunities. ALT and local NGO partners produced a series of radio programmes encouraging take-up of literacy classes between March and April 2005. There was a clear cause and effect relationship between the radio and literacy enrolment. The graph below shows the significant increase in demand for enrolment in April 2005, which resulted from the initial radio announcement about free literacy classes a month before, in March.



A random survey of 273 adult literacy students was carried out in 165 literacy centres in 17 different communes. Respondents were asked what encouraged them to attend their literacy centre. The majority (59%) cited the radio as the main reason, followed by 'my own ambition' (20%) and local assemblies (9%).

Findings on Institutional Aspects of ALT/PR

Cost effectiveness

ALT/PR estimates that it reaches about 500,000 listeners out of a population of over two million in Southern Madagascar. The total expenditure for PR between 2002 and the end of 2005 (a four year period), was €1,214,000. Roughly speaking, ALT/PR has therefore been reaching each of its listeners for just €0.6 per head per year. This compares favourably with other radio projects in Africa of a similar size. Value for money is also demonstrated by the sheer numbers and variety of developmental and educational radio programmes produced (1,540 in total, as at December 2006).



Editing radio programmes at one of ALT/PR's production studios

The Challenge of Participation

The project still faces issues relating to ensuring its radio programmes are consistently and truly participative. Applying the Participatory Production Cycle should ensure that the programmes are needs-based and involve the audience in research, material-gathering, programme-making and evaluation. However, the impetus is still an external one because programme format and content is largely determined by the partner NGOs, and the radio stations. So, there is still something of a missing link between communities' perceived and expressed needs and actual programme content.

As we have noted, 82% of listening groups report regular communal listening, but only 47% of the groups were visited at least once by their PCID partners within a year. Only 5% of listening groups reported participating in actual programme recordings, and 3% in pre testing, resulting in an absence of village 'voices' in many partner programmes. Maintaining listener groups and developing strong relationships with them depends on time and resources to dedicate across large geographic areas.

The Challenge of Sustainability

The project aims to hand over the network by 2010. Ultimately, a situation is envisaged where the PCID functions alone and draws down services from ALT, perhaps jointly funded in some cases, but with a trend towards partners taking over the financial burden in time.

Many partners (64%) partners are demonstrating that they are willing and able to source funds for communications within their existing operations. The project has already announced that it is handing the network over to the local partners and stations for the long term.

The radio stations are already associating more strongly under the name 3R (*Réseau Radio Rurale*) and PCID partners have agreed to be involved in closer support of the network.

All these are good indicators for long-term sustainability.

Conclusions

The overall conclusion of the research is that the project is achieving some notable success in changing and enhancing knowledge and attitudes on topics such as HIV/AIDS, family planning, mother and child health, environmental issues, social and administrative issues and gender inequality. Radio is also having a positive impact on uptake of health services, enrolment in literacy classes, construction of environmentally-friendly woodstoves, tree-planting, agricultural yields, and awareness of strategies for poverty reduction through income generation and community associations.

Critical to its success is ALT/PR's decision to train NGO outreach workers to make radio programmes promoting their specialised topics, rather than follow the usual course of training radio broadcasters to make programmes on unfamiliar subjects of which they have little understanding. The ability of radio to scale-up and extend the on-the-ground work of local service-providers emerges quite clearly.

The research looked at challenges that ALT/PR has tackled and, in some cases, is still facing. These are challenges involving management and networking in what is a particularly poor and disadvantaged area. The project still faces issues relating to ensuring its radio programmes are consistently and truly participative. Demand for its services is high and there is a risk of staff becoming over-stretched, particularly for senior management.

ALT/PR is demonstrably cost effective and has a good local reputation. ALT/PR is already tackling the major long-term challenge of sustaining the networking mechanism it has set up, with some early signs of success.

Recommendations to DFID:

- **Fund more projects which involve local service-providers supporting and collaborating with radio stations to produce good quality radio content.**
- **Support national-level advocacy for decentralised, plural and development-oriented broadcasting policies.**
- **Support initiatives that train and encourage public and private investment in sustaining local-level media and ICD: including radio, but also telephony, television and print.**
- **Support R & D and distribution of new energy/power sources for ICD technologies e.g. solar/windup radios, windup chargers for mobile phones, solar panels for radio transmitters etc.**

Map of Southern Madagascar showing ALT/PR's area of intervention in Tulear Province and Main Centres

