



**Experimenting with the design of policies
on sustainable resources management.**

**Phase 2 Mid-Term Report
January 2005 – February 2006**

15 February 2006

Background.....	3
1. The Desert margins Program (DMP).....	3
Expected outputs.	3
Expected Role of ARIs and IARCs.	4
Development of CIRAD-DMP proposal.....	5
2. CIRAD-DMP proposal summary.....	6
3. Progress for year 1 of phase 2.....	7
Activities	7
Results of training needs assessment.	7
Timeline.	9
Budget.....	10
4. Conclusion.....	12

Background

1. The Desert margins Program (DMP) ¹.

- Regional project of six years in three phases of two years, coordinated by ICRISAT.
- US\$16,335,000 from GEF, US\$33,537,000 in co-funding.
- Study sites: Burkina Faso, Botswana, Kenya, Mali, Namibia, Niger, Senegal, South Africa, Zimbabwe.
- Phase 1 of US\$15,219,133 (US\$4,987,134 from GEF and US\$10,231,999 in co-funding) approved for June 2002-June 2004 (extension until December 2004).

The overall objective of the DMP is to arrest land degradation in Africa's desert margins through demonstration and capacity building activities. The GEF increment to this project will enable the programme to address issues of global environmental importance, in addition to the issues of national economic and environmental importance, and in particular the loss of biological diversity, reduced sequestration of carbon, and increased soil erosion and sedimentation. Key sites harbouring globally significant ecosystems and threatened biodiversity have been selected in each of the nine countries to serve as field laboratories for demonstrations activities related to monitoring and assessment of biodiversity status, testing of most promising natural resource management options, developing sustainable alternative livelihoods and policy guidelines and replicating successful models. The project will make a significant contribution in reducing land degradation in the marginal areas and help conserve biodiversity. Guidelines, recommendations and supportive national policies that address biodiversity concerns are envisaged to be in place in the implementing countries.

The consortium of partners pools resources and expertise of nine NARS and NGOs, four sub-regional organizations (CORAF for western Africa, SADC/SACCAR for southern Africa, and ASARECA for eastern Africa), five IARCs (ICRAF, ICRISAT, IFDC, ILRI, and TSBF), and three ARIs (CEH, CIRAD and IRD, with the experience of UNEP and UNDP in the implementation of the CBD, UNFCCC and UNCCD).

Expected outputs.

The DMP aims at producing outputs related to 7 components (ARIs are expected to contribute to outputs 1 to 5) :

- 1. Ecological Monitoring and Assessment;**
- 2. Biodiversity conservation and sustainable use;**
- 3. Sub-regional, National and local capacity building;**
- 4. Alternative Livelihoods;**
- 5. Policy and legal framework ;**
6. Extension of Sustainable Natural Resources Management;
7. Stakeholders participation;

¹ Extracted from DMP project document ([download](#)) .

Expected Role of ARIs and IARCs.

At the national level, IARCs and ARIs , will assist NARS through the Scientific and Technical Advisory Team (STAT) to develop a common framework for site stratification and to characterise specific bench mark sites. The STAT will also provide support to NARS for the development of standardised data collection methodologies, storage and management systems for an understanding of ecosystem status and dynamics with regards to the loss of biodiversity. IARCs and ARIs will also participate in the implementation of studies at the benchmark sites and assist with an overall syntheses at the sub-regional and regional level. In addition, IARCs and ARIs will promote capacity building in the NARS through training courses and collaborative studies at the field level. Through these collaborative studies, IARCs and ARIs will provide support to NARS for the development of natural resource management methods and technologies that include strategies for implementing and promoting conservation, restoration and sustainable use of degraded ecosystems.

At the sub-regional and regional level, IARCs and ARIs will assess the need for new scientific, technical and social science in order to implement and fulfill all the proposed DMP outputs, and then develop appropriate training packages that meet these needs. Such training may be provided by an array of different types of courses, or through scientific team exchange visits and information sharing between sub-regions and countries to facilitate technology transfer. Sub-regional and regional synthesis of results will be developed by IARCs and ARIs through upscaling methodologies for south-south trends and through the use of systems modeling, remote sensing and GIS tools for extrapolation strategies. Biophysical and socio-economic approaches to modeling will be integrated to allow the screening and identification of scenarios that will lead to best bet management practices and policies for rebuilding biodiversity and restoring degraded and collapsed ecosystems. Once appropriate technologies and land use practices have been identified, IARCs and ARIs will assist NARS scientists to assess the training needs of all levels of stakeholders and target populations across sub-regions and countries. They will then develop training packages and appropriate policy guidelines that meet these requirements. They will also generate and produce information / dissemination packages.

It is expected that ARIs and IARCs will provide strong complementary expertise in specific fields:

- ICRISAT in crop biodiversity and natural resource management
- ILRI in pasture lands restoration
- ICRAF in agroforestry systems
- TSBF for soil fertility management
- IFDC for integrated soil nutrient management
- ARIs in models development and upscaling
- Specialized NGOs in medicinal plants
- NARS in local expertise on above

AIARCs and ARIs are expected to contribute to outputs 1 to 5 of the DMP, by unfolding activities along the following lines²:

1. Development of common framework for site stratification and characterization of specific bench marks

² S. Koala, personal communication (March 2004).

2. Provide support to NARS for the development of standardized data collection methodologies, storage and management systems for an understanding of ecosystem status and dynamics with regards to the loss of biodiversity
3. Participate in the implementation of benchmark site characterizations and an overall synthesis
4. Generating and production of information dissemination packages for all levels of stakeholders across sub-regions and countries (cross referenced to activities in national log frames)
5. Provide support to NARS for the development of natural resource management methods and technologies that include strategies for implementing and promoting conservation, restoration and sustainable use of degraded ecosystems (cross referenced to activities in national log frames)
6. With assistance of all participating researchers assess the scientific, technical and social skills required to implement and fulfil all outputs capacity.
7. Develop packages that meet requirements identified in 6.
8. Scientific team exchange visits and information sharing between sub-regions and countries to facilitate technology transfer
9. Develop an upscaling methodology to infer south-south trends at a regional level through the use of system modelling, remote sensing and GIS tools for extrapolation strategies
10. Integrate biophysical and socioeconomic approaches to modelling that allow the screening of scenarios that will lead to best bet management practices and policies
11. With assistance of all participating researchers assess the training needs all stakeholders and target populations implementation
12. Develop training packages and appropriate policy guidelines that meet requirements identified in 11.

The contributing ARIs are the French Agricultural Center for International Development (CIRAD), the Centre for Ecology and Hydrology (CEH - Edinburgh), and the Development Research Institute (IRD - UR083).

- CEH focuses on physical and chemical processes linked to carbon cycle ;
- IRD focalises on soils biology ;
- CIRAD focuses on environmental policy through an experimental approach involving upscaling, modelling, and training.

Development of CIRAD-DMP proposal

Since January 2003 CIRAD and the DMP coordination have discussed about how CIRAD can best contribute to the work of the DMP. During the brainstorming sessions that took place within CIRAD, several scientists showed a marked interest and were ready to invest heavily in the DMP. This led to a joint proposal coordinated by Dr Grégoire Leclerc, which involved scientists working in socio-economics research³. The draft was submitted in May 2003 to the DMP coordination, which responded positively.

³ Which we found was somewhat underrepresented in the current national DMP activities, suitable for transversal research, and necessary to improve impact.

In August 2003 a new version of the proposal was sent which was officially endorsed by CIRAD top management, and the next months were dedicated to polish the proposal to include suggestions from the DMP coordination in order to improve its linkages to the DMP logframe. In January 2004 we had the green light from the DMP coordination to submit a workplan and budget for period January to June 2004, which we prepared and sent for approval by CIRAD administrative bodies within two weeks. We also started the activities related to the DMP but funded by CIRAD counterpart. The approval process took several months, culminating in a full proposal signed by CIRAD and ICRISAT DG in May 2004.

2. CIRAD-DMP proposal summary

CIRAD proposal relates to socio-economics and NRM policy. ARI activities are unfolded along the framework on this proposal. We propose to set-up, starting in DMP phase 1, a learning process that is co-constructed between scientists, policy analysts, and decision-makers, where the principles learnt from the field are synthesized and shared in a way that maximizes impact. This is done not only through support to NARS but also through sub-regional case studies, in order to go towards more coherence in the approach of policy intervention for the 9 DMP countries.

In our proposal, public policy is approached as a social mediation process, where actors and sectors confront their representations, objectives, and constraints. We offer to set-up and test a platform for demonstration and capacity building with policy makers and representatives of local organizations, to help endogenize resource quality and availability in development policy design. The project contributes to build multi-institutional capacity for policy design related to Natural Resources Management (NRM). It integrates lessons learnt from local experiences, modelling and upscaling. It envisions a 5 years horizon but the strategy and work plan will be re-evaluated after 3 years.

With groups of scientists, policy makers, and local players we will test the process of policy design and negotiation, and the relevance of prevailing economic and ecologic approaches to resource diversity, quality and management. This is done by capitalizing and formalizing local experiences in NRM (e.g. DMP guidelines, appropriate technology, sustainable livelihoods) and translate in a policy making context of national and sub-regional scope. The experimental platform will support the co-construction of an approach that is both culturally relevant and scientifically sound. It is meant to be institutionally independent and neutral to allow the freedom of exploring of policy options and avoid the trap of politics. In that sense, it is a learning tool and not a problem-solving one. The project is done in close collaboration with the national DMP coordination bodies of the sub-region, and with the Pôle Pastoral Zones Sèches (PPZS), Agrhymet, IIED, IER (Mali), with ISRA, ENEA and UCAD (Senegal), the University of Pretoria, as well as with CORAF and the IARCs and ARIs involved in the project.

During **Phase 1** CIRAD has developed or completed a series of studies, models and tools necessary for socio-economic evaluation of NRM options as well as for improving policy dialog and learning (see <http://dmp.sahel.info>). Because of budget constraints, the focus was on West African DMP countries. For phase 2

CIRAD proposes to contribute to capacity/governance building for all 9 DMP countries. CIRAD has physical presence (in terms of social sciences for NRM) only in Sénégal, Burkina Faso, Mali, Zimbabwe and South Africa⁴. While we can expect better integration with NARS in these countries, our goal is to provide to all DMP countries equal access to CIRAD capacity in terms of social sciences for NRM.

Based on the requirements and constraints cited above, CIRAD contribution to DMP **Phase 2** consists in streamlining its offer in terms of capacity/governance building for NRM. The focus will be on environmental, socio-economic and policy evaluation (i.e. DMP outputs 3, 4 and 5). This will contribute to improve local capacity for evaluation of selected NRM options and policies, and for devising policy scenarios. For example NARS scientists would improve its capacity to estimate the economic impact of a given promising NRM technology and eventually fine tune its intervention accordingly; or he/she would understand better the policy cycle and how to contribute to it effectively. Full scaling-out of CIRAD capacity building activities, both in terms of countries, partners, or thematic, will be possible through the training budget of DMP CU, NARS, CIRAD, and other donors.

Because CIRAD DMP budget is limited and will allow running only 5 training workshops, we suggest a demand-driven approach based on shared costs. While CIRAD training modules constitute the core of CIRAD offer, the actual level of capacity building to be attained will depend on NARS demand and on the level of co-funding. We will also submit joint proposals to other donors to fund specific capacity building events for DMP partners.

3. Progress for year 1 of phase 2.

Activities

- January-march 2005: preparation of CIRAD DMP Phase 2 proposal
- June 2005: CIRAD proposal approved (\$100k)
- August-October 2005 first payments (\$25k+\$25k)
- 3 Nov 2005: training needs questionnaires sent to partners
- 27 January 2006: analysis of data and draft TORs

Results of training needs assessment.

- Reply from all DMP countries except Niger and Namibia
 - Some differences between West Africa and Eastern/southern Africa (focus, theme, audience)
 - A wealth of good suggestions for content, objectives, etc..
 - Some confusion between development and Learning objectives
- 4 themes selected (see Table 1):
 - Environmental Economics (WA+ESA)
 - Agriculture-Livestock-Environment interactions (more WA)
 - Bioeconomic modelling for evaluation of NRM policy (more ESA)
 - How to contribute to the policy cycle (more ESA)

⁴ The agent based in Niger is detached to France MAE.

- (note: because « Social management of biodiversity » is considered important –specially in ESA-but was not chosen as top 3 CIRAD training module, we suggest that each module includes the case of biodiversity)
- General guidelines:
 - Two weeks modules, 50 % theoretical/ 50% practical, with substantial in-situ
 - training
 - Target a broad variety of audience (scientists, decision makers, NGOs, etc..)
 - Must enable multidisciplinary
 - Low level of prerequisites
 - Specifics for each module (content, target audience, etc..)
- CIRAD teams: core identified to lead each module
- The full report can be found on <http://dmp.sahel.info> ([download](#))
- The result of the training needs assessment is synthesized in terms of references (TORs) specific to each training event, providing the following information:
 - Theme, Title, and Short description
 - Country, DMP Contact, and Date of training event
 - Person responsible and his team (CIRAD and non-CIRAD)
 - Networking
 - Development and learning Objectives
 - Target audience, Prerequisites, Participants
 - Approach and Duration
 - Detailed Plan for course
 - Budget and Co-funding strategy (12000€/module)
 - Evaluation and Follow up
 - Miscellaneous

Table 1. Theme selected by DMP coordinators, and countries where training will be realized

	Senegal	Burkina Faso	Mali	Niger	Botswana	Kenya	Namibia	South Africa*	Zimbabwe
Environment Economics	X			+		+	+		
Bio-economic modelling for NRM		X		+		+	+	X	+
Agriculture-Livestock-Environment interactions	+		X	+			+		
How to contribute to the Policy cycle				+	+	+	+	X	+

*note: the choice of South Africa will be discussed with the regional DMP coordinator

Timeline.

The TORs are just the first step in delivering successful training in 2006. Table 5 presents the different tasks to accomplish.

Table 2: timeline for implementing CIRAD training in 2006.

Task	Responsible	Deadline
Completion of TORs for training modules, selection of countries, diffusion, and selection of CIRAD teams	G. Leclerc, M Antona, H. Devautour	Mid February 2006
CIRAD teams consolidate with partners and prepare training curriculum to be approved; budget made available;	5 Teams	End April 2006
Mid-term phase 2 year 2 report	G. Leclerc	Mid June 2006
Teams prepare training modules and co-funding proposals	5 Teams; Catherine Rollin for formatting	May 2006; Mid September 2006
Setting up of Help desk	G. Leclerc	Mid September 2006
Training done in countries	Teams	Mid September-December 2006
Final Report	G. Leclerc	End December 2006

Budget.

Table 3. Approved budget for CIRAD-DMP phase 2

	CIRAD (salaries)	DMP	TOTAL
Coordination	15,000	7,500	22,500
Building training modules	67,500	13,250	80,750
In country training	18,000	51,250	69,250
Help Desk	4,500	0	4,500
Administration	18,000	10000	28,000
TOTAL	123,000	82000	205,000

Table 4. Execution of budget as of February 2006.

	CIRAD (salaries)	DMP	TOTAL
Coordination	4,500	3,081	7,581
Building training modules	30,300	0	30,300
In country training	600	0	600
Help Desk	1,500	0	1,500
Administration	9,000	5,000	14,000
TOTAL	45,900	8,081	53,981

Table 5. Approved budget (unfolded on ARI activities) for phase 2

PWB DMP GEF Phase 1 In USD		Budget Year 1		Budget Year 2		Total	
CIRAD		GEF	Co- funding	GEF	Co- funding	GEF	Co- funding
Activities	1.Characterisation of benchmarks						
	2.Standardized data collection						
	3.Overall synthesis						
	4. information packages						
	5. Conservation and restoration, and livelihood options						
	6. Identify scientific, technical, and social skills						
	7. Develop packages						
	8. Scientific team exchanges						
	9. Scaling-up methodology						
	10. Modelling						
	11. Assess training needs	8,081	5,598	705	2,944	8,786	8,542
	12. Training packages	0	40,302	73,214	73,912	73,458	114,214
	total						

*note: distribution among activities has been updated from project document of march 2005

4. Conclusion

The baseline hypothesis for the training needs assessment was that a training session that is carefully crafted to suit the needs will have a better chance to succeed. The themes and host countries have been selected in a participatory manner and CIRAD staff responsible have been identified. This assessment is the foundation of the edifice, now we have to prepare its building blocks.

The success of in country training will depend in part of the degree of interaction of the teams responsible (TR) with DMP coordination and partners. This implies that DMP country coordinators take their share of responsibility in selecting the participants, provide funding for their participation (set aside funds from their DMP training budget, get actively involved in finding other funding sources), and work hand in hand with TRs.

Several challenges remain: 1) scaling-up to other countries, which means obtaining co-funding; 2) linking to DMP case studies, i.e. blend with on-going DMP projects in country n(especially ESA); 3) selection of participants and follow-up, to avoid one-shot events with no real impact.

Building training modules in partnership and by networking is the foundation of phase 3 of the DMP, i.e. contribution of the DMP to policy reform in DMP countries and in the sub regions. This probably implies that each team should identify a champion in each country, someone who will actively use the newly acquired skills closely with DMP teams and projects.