

## RESEARCH PROJECT COMPLETION SUMMARY SHEET

DATE Sheet completed: 31 October 1999

**TITLE OF PROJECT:** Sustainable management of *miombo* woodland by local communities in Malawi.

**DFID Project Reference Number:** R6709

**RESEARCH PROGRAMME:** Forestry

**PROGRAMME MANAGER (INSTITUTION):** Mr J R Palmer (NRIL)

**SUB-CONTRACTOR (if relevant):** Forestry Research Institute of Malawi

**RESEARCH PROGRAMME PURPOSE:** Sustainable utilisation and conservation of natural woodlands enhanced.

**RESEARCH PRODUCTION SYSTEM:** Forest-Agriculture Interface

**COMMODITY BASE:** Timber and NTFPs

**BENEFICIARIES:** Rural people, forestry extension staff, estate extension service, NGOs, agriculture and natural resources extension services as beneficiaries above

**TARGET INSTITUTIONS:** as beneficiaries above

**GEOGRAPHIC FOCUS:** Malawi (*miombo* woodlands)

  

**START DATE:** 01 October 1996

**FINISH DATE:** 31 September 1999

**TOTAL COSTS:** £ 188, 986

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### 1. Project Purpose:

During the earlier project R4599 information on forest usage through time-series studies was collected about the way small farming households use their woodland and tree resources in the face of physical and socio-economic resource constraints. The rationale was the belief that the identification of the characteristics that control the supply and demand dynamics of smallholders' woodland and tree use will contribute to the understanding of how forestry interventions can more positively influence the way they manage their environment. This project was therefore designed to address the role of *miombo* woodland as a contributor of forest products and services to rural communities as well as to determine the useful marginal values and potential for varying management to generate different products and services. The project purpose is "**techniques for sustainable management of forest resources by local people developed and promoted**".

### 2. Outputs:

The project goal was to **enhance sustainable utilisation and conservation of natural woodlands**. The specific objectives were:

- a) To develop silvicultural and forest management prescriptions for *miombo* woodland in Malawi, especially those suitable for use by communities with simple supervision;
- b) To develop appropriate methodology, increase knowledge of product demand and greater understanding of the factors determining the villagers' capacity to manage indigenous woodlands;
- c) To prepare guidelines for forest management plans for Village Forest Areas, community managed sections of Forest Reserves, areas of *miombo* woodland within Forest Reserves under Forestry Department management and natural woodland areas on estate land
- d) To prepare mode plans for two pilot areas representing different ecological and socio-economic conditions based on PRA, stakeholder analysis, village workshops and meetings
- e) To raise awareness within target communities and widespread dissemination of research findings both within Malawi and regionally.

### 3. Contribution of outputs to project goal:

The project achieved its first objective of developing silvicultural and forest management prescriptions for *miombo* that allow utilisation and regeneration. Preliminary guidelines for

management of the three *miombo* types (low altitude dry *miombo*, montane hill *miombo* and wet plateau *miombo*) developed are now be used by Forestry Department and local communities in Chimaliro and Machinga. Objective two was partially achieved as work concentrated only on harvesting and marketing of NTFPs such as poles, firewood, ropes, fruits, reeds, bamboos and mushrooms. Lesser achievements were recorded on valuation and cultural factors determining *miombo* product use and management. Objective three was achieved. Planning guidelines were developed and have been adopted by Forestry Department for implementation of the World Bank funded co-management of forestry resources in Malawi.

**4. Publications:**

None

**5. Internal reports:**

1. Abbot, P. G. (1998). The supply and demand dynamics of *miombo* woodlands: A household perspectives. PhD Thesis, University of Aberdeen.
2. Chanyenga, T. (1998). Inventory of Chimaliro co-management blocks.
3. Hall, J. B. (1999). Ecology of *miombo* woodlands in Malawi: Consultancy report for Forestry Research Institute of Malawi.
4. Kamoto, J. F. (1999). Indigenous silvicultural practices in *miombo* woodlands of Malawi: a case of five villages close to Chimaliro Forest Reserve.
5. Kayambazinthu, D. (1999). Synthesis of institutional arrangements for local-level management of natural resources.
6. Khofi, C. (1998). Inventory of Mangweru Hill Village Forest Area.
7. Lowore, J. D. (1997). Coppice regeneration in some *miombo* woodlands of Malawi. Mphil Thesis, University of Aberdeen.
8. Lowore, J. D. (1998). Tour of Mangweru Hill Village Natural Resources Committee members to central and northern Malawi.
9. Lowore, J. D. and Ngulube, M. (1998). Tour notes of inspection of Indigenous Woodland Management activities by the Chief Forestry Research Officer.
10. Lowore, J. D. (1999). Coppice regeneration in some *miombo* woodlands of Malawi.
11. Makungwa, S. D. (1998). Inventory of Liwonde co-management blocks.
12. Makungwa, S. D. and Kayambazinthu, D. (1999). Monitoring and evaluating productivity in *miombo* woodlands under co-management arrangements: guidelines and results.
13. Malimbwi, R. E. (1999). Inventory of *miombo* woodlands in Malawi using permanent sample plots: Consultancy report for Forestry Research Institute of Malawi.
14. Mwabumba, L. (1998). Proceedings of training courses for members of Machinga, Mangweru and Chimaliro Village Natural Resources Committees.
15. Mwabumba, L., Chirwa, P. W. and Munthali, C. R. Y. (1999). Coppice and ground regeneration of *miombo* species under three silvicultural systems in Malawi.
16. Ngulube, M. (1999). Utilisation and marketing of Non-Timber Forest products by local communities and potentials for improvement.
17. Probyn, J. W. (1997). Report of the second meeting to discuss: Planning of research and implementation of management of *miombo* by local communities. Land Husbandry Training Centre, Zomba, 18-21 February 1997.
18. Probyn, J. W. (1997). Management of *miombo* by and for local communities: preliminary guidelines for Malawi. Forestry Research Institute of Malawi Report 97006.
19. Probyn, J. W. and Khofi, C. (1997). An inventory of three blocks within Chimaliro Forest Reserve, designated for co-management: simple techniques for resource assessment. Forestry Research Institute of Malawi report 97004.

**6. Other dissemination of results:**

A two-day consultative meeting was held in 1997 in Kasungu for senior staff members of the Forestry Department to deliberate on project findings and agree on the way forward according to the recently gazetted Forest Act.

FRIM in collaboration with District Forestry Officer (Kasungu) and his field extension staff organised a tour in 1997 for communities from Chimaliro to the southern and central parts of the country. A follow-up field tour was organised by FRIM in collaboration with District Forestry Officer (Blantyre) and his field extension staff for the community from Mangweru to central and northern parts of the country in 1998.

In response to an invitation from Forestry Department, project staff presented four papers (on silvicultural management, institutional arrangements, process of instituting co-management and guidelines for community-based inventories) drawing on results from the project, at a four-day workshop organised by the department in May 1999.

FRIM participated in the 21<sup>st</sup> environmental co-ordination meeting hosted by the Co-ordination Unit for the Rehabilitation of the Environment (CURE) at which the theme was the role of donor agencies and community-based organisations in empowering local communities in management of natural resources. At this forum the preliminary guidelines developed by FRIM from project experience were presented and discussed. Thus results from project R6709 on community-based management of *miombo* woodlands were directly imparted to NGOs.

A three-day national workshop on **Community Based Management of *Miombo* Woodlands** was organised from 27 to 29 September 1999 in Mangochi to bring together scientists, practitioners and researchers within the country with a view of sharing and synthesising the available information on community-based management of *miombo* woodlands for strategic planning.

**7. Follow-up indicated/planned:**

The immediate priority is monitoring the impact of harvesting (both wood and NTFPs) on the ecology and population dynamics of *miombo* woodlands where co-management is taking place i.e., Chimaliro and Liwonde Forest Reserves. Assessments in the PSPs and silvicultural systems trials for a further 3-5 year period will be necessary to facilitate refinement of the guidelines. A clear understanding of the reproductive efficiency of *miombo* species and how any burning regime influences this is of immediate priority.

During the project period, it became quite clear that for co-management to be successful, there is need for communities to accrue adequate, economic and timely benefits from the woodlands. At the moment there is a dearth of a body of knowledge on productive potential, processing and marketing of the important NTFPs identified in the project. It will be necessary to address these issues in order to build upon what has been gained in project R6709.

**8. Name and signature of author of this report:**

Dr M. Ngulube .....