

NARRATIVE PROGRESS REPORT

Project Title: Mopane Woodlands and Mopane Worm: Enhancing rural livelihoods and Resource Sustainability

Reporting Period: September to December 2001

Organisation: Southern Alliance for Indigenous Resources

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13 December 2001

QUARTERLY NARRATIVE PROGRESS REPORT

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ENHANCING RURAL LIVELIHOODS AND RESOURCE SUSTAINABILITY**

REPORTING PERIOD: SEPTEMBER TO DECEMBER 2001

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1.0 INTRODUCTION

This quarterly narrative report summarises the achievements made by the Southern Alliance For Indigenous Resources (SAFIRE) between September and December 2001 in the execution of the Mopane Project entitled *Mopane Woodlands and Mopane Worm: Enhancing rural livelihoods and Resource Sustainability*.

In terms of structure, the report gives a summary of the project outputs that SAFIRE is required to address in Zimbabwe. This is followed by a synopsis of the results achieved to-date, key findings from the field work / livelihood analysis, livelihood assessment methodology used and problems encountered during the reporting period.

The last section focuses on key activities to be undertaken in the next three months. Problems envisaged are also explained.

2.0 PROJECT DESCRIPTION

The Mopane Project seeks to apply new knowledge to problems in forest resource management, the resolution of which benefits poor farmers, landless families and rural artisans (Purpose RNRKS Forestry Research Strategy).

The purpose of this project is that *Livelihoods of the rural poor in the mopane regions of southern Africa enhanced through the application of innovative interventions and improved knowledge of the manageable components of mopane woodlands and mopane worms*

SAFIRE's contribution to the project is in socioeconomic studies: addressing the use of mopane worm and mopane woodland as a livelihood support for poor rural people. Although socio-economic studies are to be undertaken in Botswana, South Africa and Zimbabwe, the budget allocated to SAFIRE requires that the organisation focuses its attention in Zimbabwe only. Contractually, SAFIRE will address most of the following outputs as they relate to Zimbabwe:

PROJECT OUTPUTS AND ACTIVITIES

Output 1 Importance of mopane woodland and mopane worms and their management and utilisation within the livelihoods of different poor rural people investigated and understood

Activity 1.1 Review literature on the role of mopane worms in rural livelihoods and identify gaps in knowledge, with electronic consultation through Mopane Network

- Review of all available livelihood information from southern African field sites and research regions through search of published literature and field site records
- Review of all available regional livelihood information available to UK collaborators through search of published literature
- Production of review and critical assessment of document in draft form
- Development of project website and of email 'mopane discussion forum'
- Circulation of drafts for discussion and comment in each country

Activity 1.2 Undertake field work in Zimbabwe to fill gaps in knowledge on the role of mopane worms in rural livelihoods

- Liaison with local stakeholders and selection of field sites
- Detailed design of non-formal and participatory methodologies
- 8. Non-formal participatory fieldwork conducted on the structure of rural livelihoods in two field sites will examine differentiation within communities; seasonal patterns of livelihood resource flows and constraints; variability between years and historical changes in livelihoods and resources; relationships between farm and non-farm activities; vulnerability; institutions and institutional change affecting different groups' access to resources; indigenous technical knowledge of the biology and outbreak dynamics of *I. belina* and of mopane woodland and worm management practices; and multiple uses of mopane woodland products.
- Production and dissemination of information needed to design sampling frames in the field sites
- Design of sampling frame
- Production of questionnaire data sheets and data storage protocol across research team
- Co-ordination and organisation of village meetings at research sites to prepare for implementation of surveys
- Rapid pilot test of questionnaires
- Assessment of pilot test and rapid response agreed by all research parties
- Data collection
- Data entry and analysis
- Preparation of interim report
- Circulation of drafts for discussion

Activity 1.3 In conjunction with ultimate beneficiaries, identify potential interventions that enhance the livelihood benefits received by the rural poor from harvesting mopane worms

- Select second field site in Botswana
- Preparation for workshops in each of four field sites
- Conduct workshops in each of four field sites
- Drafting of workshop reports
- Drafting of final report on the role of mopane worms in rural livelihoods in the two targeted rural communities in Zimbabwe, in order to discover the institutions governing mopane woodlands and access to mopane resources; how these differ across the two communities; and how these have changed over time

Output 3. Traditional and emerging institutions promoting sustainable access to and utilisation of mopane woodlands and mopane worms by the poor investigated and documented
Activity 3.1 Document institutional arrangements and conflicts concerning access to and use of mopane resources <ul style="list-style-type: none">• In conjunction with Activity 1.1, review of available information on institutional arrangements and conflicts in mopane woodland through search of published literature and field site records• Production of review and critical assessment of document in draft form
Activity 3.2 Conduct field work to investigate institutional arrangements and the nature and extent of conflicts and conflict resolution mechanisms in mopane woodland resource access and utilisation in four study sites in two countries <ul style="list-style-type: none">• In conjunction with Activity 1.2, conduct non-formal participatory study to investigate the institutions governing mopane woodlands and access to mopane resources; how these differ across communities; how they have changed over time; and their impacts on livelihoods of different groups.• Preparation of interim reports• Circulation of drafts for discussion
Activity 3.4 In conjunction with relevant stakeholders, explore the formation of networks of producers for sharing information and experiences in mopane worm harvesting, processing, marketing and other activities <ul style="list-style-type: none">• Liaison with interested NGOs, government agencies and CBOs regarding the formation of producer networks to share information on mopane worm management, harvesting, processing, and marketing.
Activity 3.5 Disseminate information about institutional and other actions of mopane worm producer groups to resolve conflicts over access to mopane worm resources, and about the constraints on and effectiveness of such actions. <ul style="list-style-type: none">• Synthesise findings from reports under activities 3.1 to 3.4• Preparation of short, focussed briefing papers, and pamphlets• Presentations at workshops described under activities 1.3 and 4.9• Preparation for workshops in each field site• Conduct workshops in each field site• Drafting of workshop reports• Drafting of final report on the role of mopane worms in rural livelihoods• in the two targeted rural communities in Zimbabwe and South Africa respectively, in order to discover the institutions governing mopane woodlands and access to mopane resources; how these differ across the two communities; and how these have changed over time

3.0 RESULTS ACHIEVEMENT TO-DATE

The main achievements/observations during the reporting period September 2001 to December 2001 are as follows:

1. *Mopane worm (Imbrasia belina) and mopane woodland secondary data collection and review:* Available literature on rural household livelihoods from Southern Africa especially Zimbabwe has been collected. The SAFIRE Mopane Project team is in the process of reviewing all the information and producing a report to be circulated to each of the countries participating in the mopane research project.

2. *Field work in Zimbabwe to fill in gaps in knowledge on the role of mopane worm to rural households:* The mopane research project was introduced to the Gwanda, Chiredzi and Mwenezi Rural District Councils. In consultations with the RDCs and CAMPFIRE managers in each district, research sites were then identified. This was followed by community livelihood assessment workshops and household social analysis interviews.

In Chiredzi, the livelihood assessment exercise was conducted in 3 villages: Chifamba, Chomupani and Makambe. In Mwenenzi the RDC directed that the research be undertaken in a Model C (Villagisation) Resettlement Area. The site is known all over Mwenenzi district and beyond as a mopane worm area.

In Gwanda, livelihood assessment field work was done in Wards 15 and 17. The two wards are located about 90km south of Gwanda town. The following factors influenced site selection in Chiredzi and Gwanda:

- i) The research team preferred communal areas with a history of mopane worm harvesting (for at least 4 years)
- ii) Areas dominated with mopane woodland.
- iii) Communal areas with some level of commercialization of mopane worms.

The SAFIRE mopane project team is in the process of compiling the livelihood analysis reports.

3. Investigation of institutional arrangements and the nature and extent of conflict resolution mechanisms in mopane woodland resource access and utilization: During the field work, focus group discussions and key informant interviews were undertaken to explore the nature and extent of conflicts in mopane resource access and utilization in the different research sites. Though salient at the present moment, it is clear that there are potential conflicts looming especially with regards firewood, harvesting of mopane worms by outsiders, and individual marketing and pricing of mopane worms.

All planned activities were achieved during the reporting period. Through effective team work, more sites were even incorporated in the project and the research successfully conducted in all of these in the shortest possible time. However, accompanying consolidated reports for items 1 to 3 above will be finalised by 15 January 2002. There is still a lot of information that needs to be reviewed and collated for use in the final reports.

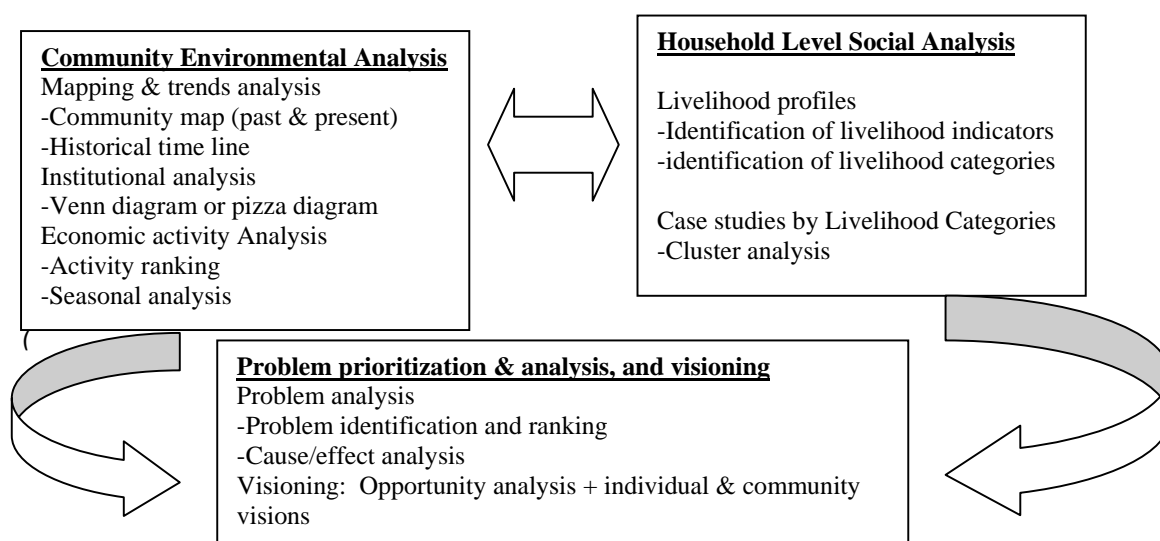
4.0 FIELD METHODOLOGICAL APPROACH

The diagram below summarises the approach that was used in the livelihood assessment across the research sites. The issues detailed under each component (environmental analysis, social analysis, and synthesis) were addressed in general terms and then more specifically with focus on mopane worms.

At the community workshops which focused more on environmental (economic) analysis, rural households were randomly placed in groups of at least 6 people to discuss specific issues such as livelihood categories and profiles, vulnerability context for mopane worm, problem analysis (cause effect analysis, problem prioritisation) etc.. Issues detailed under the household level social analysis were also tackled. At each workshop in Gwanda, about ten groups were formed. All groups had the opportunity to present the results of their deliberations, comments and contribution made in a plenary like situation.

At least twelve households falling into different livelihood categories (wealth rankings) were further interviewed to determine their vulnerability to shocks/stresses and other trends, household resource flows/household livelihood needs and problems/constraints. The discussions were more focused on mopane worms than anything else, although of course more general issues featured too. A opportunity /strategy analysis was also undertaken with each household in terms of visions and priorities. The focus was more on inter and intra household differentiations. Fig. 1 above gives a summary of the tools and HLA sequencing.

Fig 1: Household Livelihood Assessment (HLA) tools and sequencing:



¹After Drinkwater 1998

5.0 PRELIMINARY FINDINGS FROM FIELD WORK

5.1 KEY OBSERVATIONS AND CONSTRAINTS

(i) Harvesting of mopane worm is a traditional practice in Gwanda South. More than 90% of the households in the research sites harvest mopane worms yearly. Both the poor and rich harvest mopane worms for consumption and sell. However, the poorest households collect only enough for their consumption / subsistence. According to the councilor for ward 15, the poor think that they lack social, physical and human assets required for *I. belina* harvesting. Despite this, mopane worms were ranked as the number one source of income since it benefits at least all livelihood categories, the poorest included. Though a lot of money is derived from livestock sales in the district, only the rich and a few households that are better-off have these assets.

¹Drinkwater, M. (1998): The Conceptual Framework for Livelihood Assessment, CARE South Africa (Unpublished)

(ii) Mopane worm production: Mopane worm outbreak has increased in the districts since 1997. Skills are required in disemboweling the worms. As a result of this those not experienced in the business can harvest as few as 5 twenty-litre buckets per year. The much more skilled and experienced women who often use gloves can fill as much as 18-20 buckets mopane worm per season. This translates to an average of \$28,800 to 32,000 per person per year (mopane worm season). December and April are the mopane worm months in Gwanda South.

(iii) Product Marketing: Current income levels derived from mopane worm marketing can be trebled if the following problems were successfully addressed: determination of prices by the buyers (buyers are the ones who determine prices); information sharing on existing markets for mopane worm; transport problems to market places and inaccessibility of most roads during the wet season which is actually the mopane worm production season; inadequate facilities for communal storage of mopane worms, mechanisms to eliminate or reduce barter trading; and lack of investment and skills to package product at community level.

(iv) Deforestation: Recently, there has been an influx of mopane harvesters from Mashonaland in Gwanda. These 'aliens' as the communities put it, have been responsible for cutting down trees for firewood required in processing *I. belina*. Most do not observe rules and regulations and even end up destroying fields bush fence. In some case, some bring down the whole tree in order to get a few worms in that particular tree. *Local rules must be strictly enforced to avert a situation where deforestation might affect the outbreak of mopane worms in the region.*

5.2 SOME STRATEGIES IDENTIFIED BY COMMUNITIES TO ENHANCE THE CONTRIBUTION OF *I. BELINA* TO RURAL LIVELIHOODS

- Group marketing to guard against exploitation by middle men from Harare and Bulawayo.
- Institutional intervention to moderate marketing of mopane worms as is done for cattle sales in the districts. The mopane worms could be packaged at community level in order to fetch more during sales.
- Development of appropriate technologies to process, preserve and store mopane worms. This will enable communities to sell the product in lean periods thus taking advantage of the high prices offered during that period. *In April 2001, a 20 litre bucket of *I. belina* was sold for Z\$600.00. In October 2001, the price had more than doubled. Those who had stored the product sold these for Z\$1600.00.*
- Securing export markets for *I. belina*: Communities in Gwanda require assistance in the identification and development of mopane worm markets in South Africa and the Democratic Republic of Congo.
- According to the communities in all three districts, the first step in achieving all this should be the construction of Mopane Worm Storage Warehouses in each ward. This purely research project will go a long way if it manages to assist communities in the establishment of one or two warehouses. This is the communities' number one

priority. However, in conjunction with this, other project interventions to boost rural communities' livelihood security should be implemented to complement mopane worm harvesting and marketing.

5.3 PROBLEMS / CONSTRAINTS ENCOUNTERED DURING THE REPORTING PERIOD

1. The cost of running vehicles, accommodation and food has incredibly gone up in Zimbabwe. As a result of this, the budget lines for transport, workshops and accommodation have suddenly become underfunded. Apparently, it will be difficult to bring together community representatives from different research sites for workshops/meetings to share information and experiences in *I. belina* harvesting and marketing as required by the project due to budgetary constraints.

2. Communities are expecting quick tangible results from the mopane research project. Since we can not promise a full fledged mopane project after completion of this research, the SAFIRE project team is already under pressure to come up with some practical interventions to address at least one or two of the strategies (e.g. warehouse and enterprise (mopane worm) development training) proposed by the communities during the recent livelihoods assessment field work. It is important for the project team including the project coordinators (Drs Ghazoul and Stack) to start sourcing some funds for such initiatives concurrent to the research work.

Clearly, this problem underscores a policy and developmental implication of work undertaken during the reporting period. Research should culminate into a project proposal addressing key issues (constraints, strengths, problems etc) identified by communities. In addition to this, the current research should endeavour to tackle at least one or two strategies/opportunities proposed by the communities. Failure to do this might put SAFIRE's credibility into disrepute with the communities.

6.0 KEY ACTIVITIES FOR SAFIRE IN THE NEXT THREE MONTHS

1. Compile literature and field work / livelihood analysis reports. Reports completed and circulated to all project team members in different countries.
2. Organise feedback meetings/workshops in the study sites. The results of the livelihood assessment conducted will be discussed, verified, confirmed and authenticated by communities. Further qualitative and quantitative information will be gathered to fill in gaps, if any.
3. Development of questionnaires and their administration in selected study sites. This will depend on further information gaps identified after compilation of the reports in (1) and the proposed workshops/meetings in (2) above.
4. Stakeholders' workshop in Zvishavane mainly for community representatives from Chiredzi, Gwanda and Mwenezi – to share information and experiences in mopane worm harvesting, processing and marketing as well as identifying potential strategies that enhance the livelihood benefit received by the rural poor from harvesting mopane worms. This workshop will also explore the formation of networks for producers for

sharing information and experiences in mopane worm harvesting, processing, marketing, conflict management and other activities.

5. Report writing on institutional arrangements and conflicts in mopane woodland management – and dissemination of information in such for a as planned in (4) above.

7.0 PROBLEMS FORESEEN

No problems are envisaged in the next quarter apart from the problems/constraints explained above (see section 5.3).

8.0 CONCLUSION

Clearly *Imbrasia belina* is a key resource to rural people in communal areas of Zimbabwe. The mopane research project is viewed by all RDCs as a major breakthrough in terms of efforts to enhance rural livelihoods.

The livelihood assessment is key to this research and subsequent mopane projects implementation in Southern Africa. The differentiation of households in different livelihood categories and visioning / problem prioritisation conducted with each wealth group will inform the design of future projects and also specify the correct target groups for mopane project initiatives.

Rural communities are starved of proper information on mopane worms! Quite rampant is the indigenous technical knowledge in all communities. It is important at this early stage to support and strengthen what communities already know, as well as provide adequate conventional technology information and skills on mopane worm and mopane woodland management. Any interesting results from different research sites (Forestry Commission, KyT, Frank Taylor, IES, South Africa etc..) should be communicated and shared with everyone in order that this could be applied or demonstrated in other countries where possible.

Rightly so, research teams especially in Zimbabwe should work closely with RDCs in order to initiate discussions on policies that influence mopane worm and mopane woodland management. Appropriate policies on mopane worm and mopane woodland management are required in all mopane areas. An enabling policy framework for mopane worm and mopane woodland management will help enhance incomes derived from mopane products especially by the poor rural communities.