STEP IV: IDENTIFICATION AND DESCRIPTION OF POTENTIAL AGROFORESTRY INTERVENTIONS

Duration: 7 days

Introduction

This step involves the identification and description of potential agroforestry interventions which ease the constraints and use the opportunities identified in Step III (Examples III(15) and (16)). This involves provisional selection of interventions, discussions with farmers, and the preparation of detailed descriptions, including research and extension needs. The interactions and complementarities among the potential interventions are also indicated.

Methods for developing on-farm and communal interventions are summarised in Figures 4 and 5. These methods rely on Step III to provide:

* *general descriptions of land and water resources (Step III, Activities 2, 3, 5, 6, 12, 15), and more detailed descriptions of woodland resources, their species composition, structure and utilisation (Step III, Activities 9, 13, 14);*

* *detailed descriptions of soil resources and soil management constraints and opportunities that might be addressed by agroforestry interventions;*

* *interactions, beneficial and adverse among resources and land uses (Step III, Activities 2, 3, 5, 6, 9, 13, 14, 16, 17);*

* *maps of land use, and erosion hazard (Step III, Activities 15, 16);*

* *identification of 'niches' for agroforestry (Step III, Activities 2, 3, 6, 9, 15);*

* *identification of useful indigenous tree species (Step III, Activities 2, 3, 5, 6, 9, 13, 14);*

* *a classification of the range of household categories and the major constraints on the production systems of each category (Step III, Activity 17);*

* *understanding of the type of strategy farmers use to overcome these constraints (Step III, Activities 3, 9);*

* *knowledge of how the resource endowments of different categories of household influences the way they use the environment (Step III, Activities 3, 9);*

* *understanding of how the production, management and use of woodland resources forms part of the household production system (Step III, Activities 3, 9);*

* *knowledge of what conflicts occur over access to resources, particularly woodland resources, and how successful different groups of people are in securing access (Step III, Activities 3, 5, 9);*

* *understanding of how local institutions manage and regulate access to woodland resources (Step III, Activities 3, 5, 9).*

Objectives and Outputs

By the end of this step we aim to have:

(i) encouraged local people to discuss their views on the problems which could be tackled by agroforestry;

(ii) an understanding of the range of views held by farmers from different household types;

(iii) a set of objectives on which to base agroforestry

Figure 4

IDENTIFICATION & DESCRIPTION OF ON-FARM AGROFORESTRY INTERVENTIONS

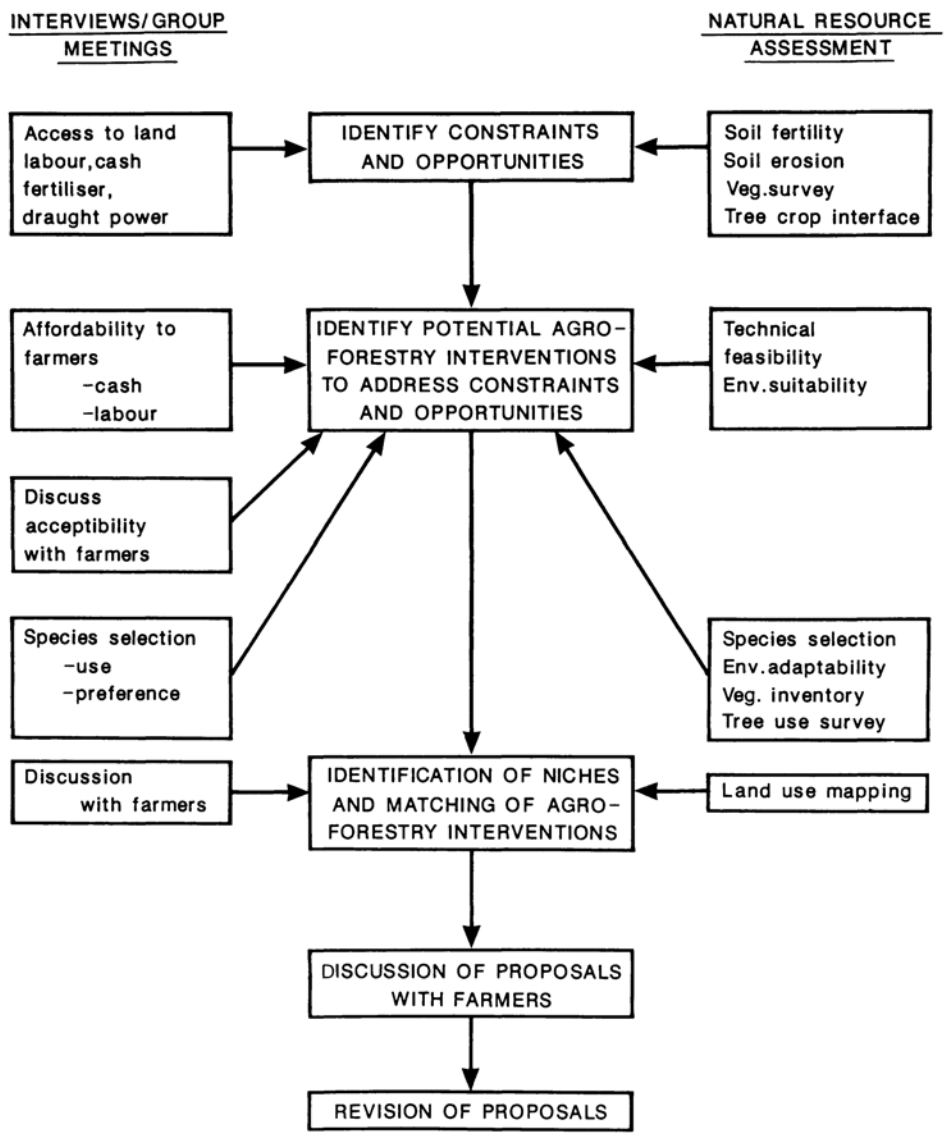
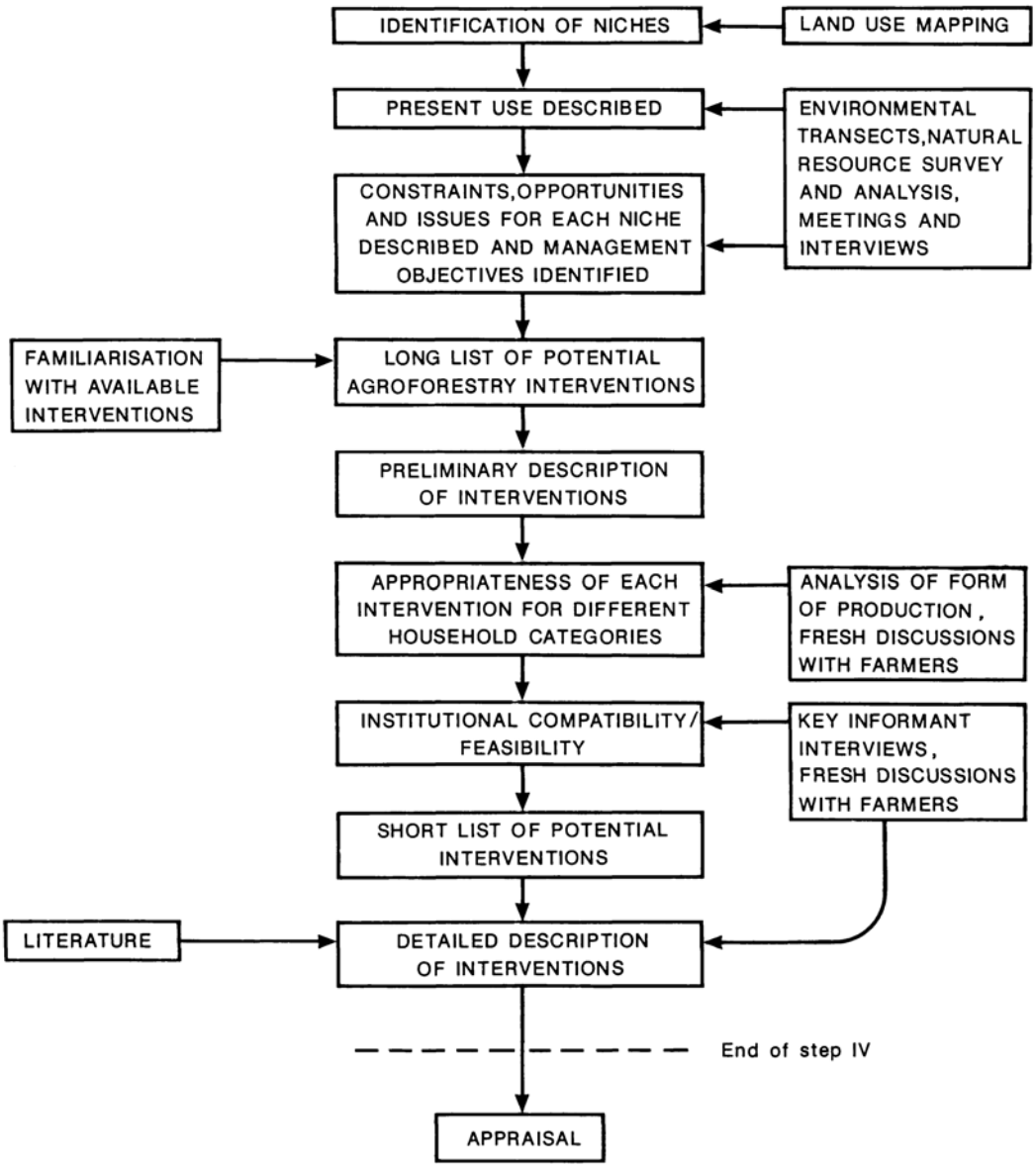


Figure 5

IDENTIFICATION AND DESCRIPTION OF COMMUNAL AGROFORESTRY INTERVENTIONS



interventions, and a set of criteria by which to appraise them;

(iv) identified a set of "best bet" agroforestry interventions;

(v) described technical details, management and implementation of each potential agroforestry intervention;

(vi) identified research and extension requirements of the agroforestry interventions;

(vii) discussed with farmers' groups how the agroforestry interventions could be implemented;

(viii) indicated the complementarity of the potential interventions in an agroforestry strategy.

List of Activities

1. Workshop on selection of potential agroforestry interventions.
2. Informal discussions with individuals and groups.
3. Workshop to modify interventions.
4. Further discussions with individuals and groups.

Activity 1. Workshop on Selection of Potential Agroforestry Interventions

A plenary session is held to explain methods for identification and description of potential agroforestry interventions. In Shurugwi the training team then divided into two groups, one group dealt with communal, the other with on-farm interventions. The workshop ended with another plenary session to present and discuss each group's work. The basis for the activity is the synthesised information from Step III Activity 17. Close attention is paid to the specific constraints and opportunities of particular categories of farmers (Examples III(15) and (16)).

Procedures for Identifying and Describing On-farm Interventions

The following procedure was applied at Shurugwi (Figure 4):

1. an initial briefing on principles and practice of agroforestry, with examples of exotic and indigenous agroforestry components and systems;
2. a review of literature on existing agroforestry practices and systems, using material from Agritex and ICRAF;
3. a review of the synthesised information from Step III to identify constraints and opportunities faced by the three categories of farmer (see Examples III(15) and (16)), and the agroforestry activities currently practiced (fruit trees, live fences, trees on contour bunds, boundary trees, trees in fields and so on) – see Examples III(19), (20) and (21);
4. bearing in mind the opportunities open to each category of farmer, possible agroforestry interventions are sought for each constraint in turn. For example, in Shurugwi leading farmers had more cattle on average, suffered from lack of dry season forage, and would benefit from fodder banks. However, they were relatively well-off in manure, which was a constraint on arable production by poorer farmers who have few cattle and lack cash for inorganic fertiliser. Poorer farmers are therefore likely to benefit from agroforestry measures which enhance soil fertility cheaply – the growing of leguminous trees for example;
5. indigenous shrubs and trees with potential roles in the interventions are identified from the Step III work and Agritex publications; indigenous and exotic species were also sought in ICRAF and Agritex literature. Selection criteria included: palatability and nutritional value for livestock; productivity; growth form; response to browsing, lopping, coppicing and pollarding; seed viability and seedling survival; suitability to local climate and soils;

growth rate at various ages; duration of rotation; suitability for mixed planting; energy value of wood; resistance of wood to termites; suitability as source of posts and poles; productivity as a timber source; suitability as a multi-purpose tree (Examples III(19), (20), (21));

6. a preliminary assessment is made of the technical feasibility of the possible agroforestry interventions identified, and infeasible options discarded. For example, agroforestry development has occurred mainly under more humid climates than that of Shurugwi, consequently many of the practices do not allow for the severe soil moisture constraints affecting arable production;

7. next, 'niches' suitable for agroforestry are identified and matched with the potential interventions. A niche means here a type of land where shrubs and trees can or do grow. Example IV(1) lists the on-farm niches and matches them with a set of potential interventions;

8. current uses of niches are now described, and an alternative, non-agroforestry intervention identified for each. The aim was to assess the opportunity costs of agroforestry interventions;

9. a preliminary description is made of each potential intervention, including information on its purpose, benefits and justification, adoptability by each category of farmer, implementation constraints and potential woody species. The on-farm interventions devised at Shurugwi are summarised in Example IV(1). Research and extension requirements and issues were also reported for each on-farm intervention. These are included in the Research Report;

10. finally, interrelationships among potential on-farm agroforestry interventions are analysed, for example:

    - competition and complementarity over scarce resources – nutrients, soil moisture, land, labour, cash, capital, draught power;
    - input-output relationships, as in the case of nurseries supplying other interventions with seedlings, and other interventions growing seeds for nurseries;
    - training and management requirements;
    - complementarity and overlap in research and extension requirements.

    The purpose is to assess the compatibility of interventions within an agroforestry strategy.

Procedures for Identifying and Describing Communal Interventions

While one group devises its set of on-farm interventions, the other should use a different procedure for developing communal interventions, in this way (Figure 5):

1. familiarisation with indigenous and exotic communal agroforestry practices and systems – for example management and use of planted woodlots, and natural communal woodlands;

2. identification of communal agroforestry 'niches' (Example III(22));

3. drawing on synthesised information from Step III, description of problems and issues for each niche. For example, *makuvi* are key dry season grazing areas, they have a high potential for agroforestry, but cultivation is prohibited by law because of the potentially harmful effects on hydrology;

4. preliminary selection of potential interventions for each niche;

5. identification of likely shrub and tree species for each intervention. Selection criteria were similar to those used in selecting on-farm trees;

6. description of current use, and identification of prospective alternative, non-agroforestry interven-

tions (e.g. rice-growing in *makuvi* – illegal at present). The idea was to assess the opportunity costs of agroforestry interventions;

7. the appropriateness of each intervention for the different household categories is assessed. For example, a communal fodder bank is unlikely to bring great benefits to those with few cattle, but a poor household lacking a Scotch cart, cash and labour for getting fuelwood is likely to benefit from a communal woodlot;

8. the communal organisation and management requirements of each intervention is assessed, and compared with the capabilities of existing institutions such as Farmers' Group, Women's Club, Village Committee, VIDCO, WADCO and District Council;

9. a preliminary assessment of the technical and institutional feasibility of each intervention is made, and infeasible options discarded;

10. a preliminary description is made of each potential intervention, based on the information from 1-9 above, and written up as a brief report for plenary discussion;

11. interrelationships among potential communal agroforestry interventions are analysed to assess their complementarity within an agroforestry strategy;

12. the extension and research requirements of each intervention are assessed.

Plenary Discussion of Potential Agroforestry Interventions

The training team next meets in plenary session to hear and discuss presentations of the sub-group reports. Inter-relationships between the on-farm and communal interventions are analysed at this stage. Improvements are made to the interventions in the light of the discussions, and descriptions modified accordingly.

Activity 2. Informal Discussions with Individuals and Groups

This activity is proposed on the assumption that technical, socio-economic and institutional questions will usually arise from the discussions of potential interventions in Activity 1. The individuals and groups selected will depend on what questions arise, but they might include Forestry Commission or Agritex staff at various levels, NGOs, farmers representing a particular gender or socio-economic category, a VIDCO, WADCO or District Council representative, a Women's Club, Farmers' Group, a Village Development Committee and so on. See Example IV(3).

Activity 3. Workshop to Modify Interventions

The informal discussions are reported in plenary, and modifications made to the interventions as necessary when the sub-groups re-form. The output from this activity should be a set of compatible agroforestry interventions, each described in detail.

Activity 4. Further Discussions with Individuals and Groups

The interventions should again be discussed with farmers individually or in groups, and with relevant government departments, NGOs and local institutions.

Example IV(1) - Activity 1

Summary of Potential On-farm Agroforestry Interventions

Agroforestry Intervention	Niche	Major Function/ Role	Other Benefits	Constraints	Justification	Suitability to Farmer Categories	Existing Practice	Possible Species*
Green manure bank	Along contours field margins field boundaries and between fields	Addition of organic matter to improve soil physical and chemical properties	Potential for fodder supply, fuelwood	Labour availability	Existing fertility levels are low. Non-availability of adequate cash/ manure for sustainable crop yields.	Most applic- to the poor farmer who has limited access to manure and cash for fertilizer.	Use ant-hill soil. Use manure if the farmer has cattle. Some trees left in the arable fields. Application of fertilisers (less or none in the case of the poor farmer).	*Ficus sur* *Parinari curatellifolia* *Ficus natalensis* *Cajanus cajan* *Leucaena leucocephala* *Cassia siamea*
Intercropping *Acacia albida* with maize/ groundnuts/ millet	All arable fields	Improvement of soil fertility through N fixation and leaf fall	Provision of fuelwood and browse for livestock. Will also provide building/ construction materials	Depending on planting pattern, the trees might disrupt ploughing activities	Existing soil fertility levels are low. Also fodder/browse, fuelwood and building/ construction materials are in short supply	Most applic- to the poor & middle farmer	Soil fertility maintenance as above. Fuelwood collected from own fields and grazing areas. Building/ construction wood obtained from own fields or bought	*Acacia albida*

* A number of other indigenous species are also potentially suitable.

Example IV(1) - Activity 1

Summary of Potential On-farm Agroforestry Interventions Cont'd

Agroforestry Intervention	Niche	Major Function/ Role	Other Benefits	Constraints	Justification	Suitability to Farmer Categories	Existing Practice	Possible Species*
Planted fallow	Arable fallow land	Fertility restoration	Fuelwood/ poles	Labour esp. at establish-ment stage.	The reasons for leaving arable land fallow are lack of draught power, labour and/or declined soil fertility. The proposed agroforestry intervention though requiring some labour will help alleviate the soil fert-ility problems while offering other benefits	The poor farm with limited labour and/or cash for fertilisers.	Leaving arable land fallow without further improvements.	*Acacia albida* *Leucaena leucocephala* *Cassia siamea* *Dalbergia sissoo* *Sesbania grandiflora*
Grazing fodder banks	Contour bunds, unused land between fields, fence lines in homefields.	Improve fodder availability and quality.	Restoration/ improvement of nutrient and organic matter status. Improved quality of livestock products. Stabilisation of contour bunds. Firewood, fencing and green manure.	Labour. Land shortage. Scarcity of seedlings.	There is lack of fodder at the moment, esp. during critical periods.	Mainly leading middle and poorer farmers who have livestock.	Cattle fed on stored maize stalks and browse on some trees in the grazing areas and mainfields and some trees on contour bunds.	*Albizia lebbeck* *Leucaena leucocephala* *Sesbania* *Acacia senegal* *Acacia albida* *Acacia galpini* *Gmelina arborea* *Cassia abbreviata* *Cajanus cajan* *Bauhinia galpinii* *Gliricidia sepium*

* A number of other indigenous species are also potentially suitable.

Example IV(1) - Activity 1

Summary of Potential On-farm Agroforestry Interventions Cont'd

Agroforestry Intervention	Niche	Major Function/ Role	Other Benefits	Constraints	Justification	Suitability to Farmer Categories	Existing Practice	Possible Species*
Cut & carry fodder banks	Homefield boundaries, near livestock locations.	Improve fodder availability and quality.	Improved quality and quantity of manure. Green manure. Soil and moisture conservation.	Labour. Land. Scarcity of seedlings.	There is a critical shortage of fodder especially during critical periods - dry season.	All farmers with livestock, but poorer farmers tend to lack labour.	Cattle fed on stored maize stover. Cattle browse on some trees in the grazing areas, main-fields and contour bunds.	Same as above.
Contour planting	Contours	To stabilise and use contour ridges productively.	Stabilise contour bunds. Provide soil cover. Improve adjacent soil fertility. Productive use of contours. Reduce contour maintenance work.	Additional labour required.	Contours if not maintained adequately cause rill and gully erosion.	Suitable to all farmer categories, but those lacking labour are at a dis-advantage.	Some farmers (especially poorer farmers) leave and use trees on their contour ridges which are used and hence generally kept low.	*Acacia albida* *Cassia siamea*
Barrier strips (grass)	Above or below contours, or between contours.	To supplement or partially replace mechanical conservation measures.	Prevent soil erosion. Provide fodder. Mulch.	Use of cropping area. Spreading of roots. Ploughing.	Less heavy labour required than is needed to maintain contour ridges.	To all farmer categories.	Some farmers already leave a strip above or below contours which forms a forage area for cattle	
Barrier hedges	On eroded contour ridges or between contours.	To provide a barrier to run-off and a soil cover.	Mulch. Improve soil fertility.	Competition with crops. Hindrance to ploughing. Labour requirements.	Some contour ridges on steeper slopes may themselves be susceptible to erosion and often much sheet wash occurs between contours.	To farmers with sufficient labour and particular erosion and soil fertility problems.	Not used.	*Cajanus cajan*

* A number of other indigenous species are also potentially suitable.

Example IV(1) - Activity 1

Summary of Potential On-farm Agroforestry Interventions Cont'd

Agroforestry Intervention	Niche	Major Function/ Role	Other Benefits	Constraints	Justification	Suitability to Farmer Categories	Existing Practice	Possible Species*
Windbreak and shelterbelt	South-east to east sides of homesteads & mainfields.	To provide shelter and other productive wood uses.	Reduce soil and leaf evap. and transpiration. Reduces erosion. Provision of wood and leaf resources.	Shading effect on crops. Competition from tree roots. Possible harbouring of pests and diseases.	People need woodlots for various tree uses. This is an additional benefit.	Poorer farmers plant near homestead. Leading farmers home and main-fields.	A few farmers plant single-row gum tree windbreaks. Others talk of trees around the home (e.g. gums, fruit trees) providing wind shelter.	
Live fences	Field perimeters, boundary demarcations Cattle kraals.	To provide fencing which serves other wood uses.	Multiple tree products. Organic matter.	Planting material. Competition with crops.	Wire fencing is expensive.	All farmer categories. Poorer farmers have more difficulty affording construction and replace-ment costs of post and wire fences.	Limited use of live fences noted.	
Woodlots Establishment	Near boundary of homefield and mainfield. Niches unsuitable for cropping. Fallows. Along contour bunds.	Poles and fuelwood supply.	Cash income. Fodder. Depending on species, soil fertility.	Labour. Cash. Scarcity of seedlings.	Shortage of poles and fuelwood. Great necessity for poles and fuelwood for all household categories.	All house-holds can establish woodlots of varying sizes at various locations presently available to them at home-field and mainfield.	Few woodlots exist but fuelwood and poles are collected from nearby wood-lands which are now depleted.	*Eucalyptus* *Leucaena* *Azadirachta indica* *Cassia siamea* *Acacia albida*

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* A number of other indigenous species are also potentially suitable.

Example IV(1) - Activity 1

Summary of Potential On-farm Agroforestry Interventions Cont'd

Agroforestry Intervention	Niche	Major Function/ Role	Other Benefits	Constraints	Justification	Suitability to Farmer Categories	Existing Practice	Possible Species*
Fruit trees planting	Homestead. Boundaries of homefield and mainfield. Contour bunds Within homefield and mainfield.	Fruits and cash from sales of fruits.	Provision of shade and shelter. Fodder. Firewood. Beverages and wine.	Limited supply of improved planting materials. Grazing animals. Long gestation before fruiting. Frost and termites. Information on planting & management techniques lacking.	Fruits are needed for balanced diet especially of rural poor. Fruit tree growing is already popular. Fruit trees can be easily fitted into the prevailing household land use types.	Every household category can plant fruit trees as individual trees or as large-scale orchards.	Fruit trees (especially exotic ones) are grown in homesteads. Fruits are collected from farm trees e.g. *Parinari* and *Scleocarya*	Mango Guava Orange Peach *Parinari* *Azanza garckeana*
Household nurseries	Gardens and homefields	Provide cheap sources of planting materials and/or supplement supplies from communal nurseries.	Income generation. Education to the farmer on nursery techniques. Cut down transport costs and time lag between collection and planting of seedlings if obtained from communal nursery.	Labour. Protection. Transport. Cash to purchase inputs. Limited information on propagation techniques of some species.	Inadequate planting materials. Popularity of tree planting is high. Expressed need for diversification of species.	All farmer categories although the level may differ depending on availability of inputs.	Practice of establishing household nurseries is there but on very limited scale.	All species indicated for the agroforestry interventions may be raised - guided by the household preferences.

* A number of other indigenous species are also potentially suitable.

Note: The research and extension requirements for these interventions are set out in detail in the Research Report.

Example IV(2) – Activity 1

Summary of Agroforestry Interventions Proposed for Communal Land

INTERVENTION	OBJECTIVES	LOCATION	INSTITUTION	LABOUR	INPUTS AND COSTS	BENEFITS AND ACCESS	ISSUES AND RULES
Nursery	Establishment or reinforcing nurseries	Flat land near reliable water source	School Farmer group VIDCO Ward	Free labour for all except Ward level of operation. Intensive periods May to January	Plastic bags, wire, pesticides, water, seeds.	All farmer categories benefit except where nursery developed by farmer group	
Enrichment planting	To provide fuel and timber	Hills	VIDCO	Required during first rains	Seedlings, protection, transport	All	Time of labour conflicts with ploughing
Planting	Erosion control, to provide fuel, timber fencing	Riverine strips	VIDCO	Required during first rains	Protection, ring fences for valuable trees, seedlings.	All	Paths and grazing, fencing upkeep, labour mobilisation
Planting	To provide fruit trees especially	Vleis in arable areas	VIDCO	Community labour required during first rains	As above	All	Agreement on separated grazing "ownership of vleis in arable areas". Ecological impact on vlei
Planting	To provide wood products, browse and fruit	Inter-farm grazing and drainage lines	Individual; VIDCO	Community labour for planting, transport of seedlings. Required during first rains	Transport, seedlings, water	All	No herding during first season. Trees sufficiently large by first dry season to withstand browsing
Planting	As above	Sacred areas	Lineage group project or village	As above	As above + fencing	All	Organisation by elders of the community

Example IV(2) - Activity 1

Summary of Agroforestry Interventions Proposed for Communal Land Cont'd

INTERVENTION	OBJECTIVES	LOCATION	INSTITUTION	LABOUR	INPUTS AND COSTS	BENEFITS AND ACCESS	ISSUES AND RULES
Planting	Provide browse primarily and wood products, fruit	Topland grazing area	VIDCOs (jointly?)	Required at first rains and for weeding	Fencing, transport and watering. High costs $1600/ha	All but especially cattle owners	Choice of area for fencing; mobilisation of labour; fence maintenance, grazing agreements, rights of access, boundary disputes
Cut-and-carry fodder banks	To provide dry season feed	Vlei		Communal labour, intensive period during establishment, then regular management. Leading farmers provide oxen, labour from poorer farmers	Labour, seedlings, fencing?	All but especially livestock owners	Ecological impact, land use legislation. Agreements on labour and access, distribution of benefits
Woodlots	To provide fuel and poles at a convenient source	Homefields and grazing areas	Individual or communal at VIDCO level	Labour for land clearing, pitting, planting, weeding, pruning and thinning	Draught power for land clearing	All	
Upland grazing/ woodland management	To maintain indigenous woodlands for long term benefits	Upland grazing areas	VIDCO because grazing areas controlled at this level. Special committee needs to work out management plan	Communal labour for herding, guarding. Individual labour for collection of wood	Saws, axes fencing, labour	All will benefit from sustainable supply of woodland resources. Benefits from browse to livestock owners	Need locally agreed rules on protected areas; where and what to cut, powers of the guards. Success depends on alternative source of browse and wood during protection, therefore on fodder bank and woodlot establishment

Example IV(2) - Activity 1

Summary of Agroforestry Interventions Proposed for Communal Land Cont'd

INTERVENTION	OBJECTIVES	LOCATION	INSTITUTION	LABOUR	INPUTS AND COSTS	BENEFITS AND ACCESS	ISSUES AND RULES
Tree/crop intercropping	To provide cropping during early establishment of woodlot	River gardens					Shortage of sites creates competition between woodlot and garden; problem of the 100m legislation; ecological impact

Example IV(3) - Activity 2

Informal Discussion of Potential Agroforestry Interventions
Summary of Makandire VIDCO Meeting: 24/3/88

Starting

The meeting was scheduled to start at 10.00, but eventually only got underway at 12.15. The turn-up was very small - only 15 people (10 men, 5 women). The major reason for this was that many people we had spoken with, or who had attended the first VIDCO meeting, were engaged elsewhere. There was a meeting for farmer group chairmen at Donga; a training course run by the Methodist church in Gweru; another women's course at Tongagara.

Thus although scheduling meetings for *chisi* days is convenient and avoids taking farmers' time on working days, it is likely to lead to clashes with other events.

The meeting

The meeting began with a prayer.

We then opened the meeting by reminding people of our objectives and the work we had done so far. We also outlined what we hoped would be the outcomes of our work: firstly, that it would contribute to extension and research initiatives and secondly, that we would be able to identify possible local community and farmer initiatives. A short summary was then presented of some of the constraints we had noted which affect farmers' production systems.

From here the meeting led into a discussion on the strategies farmers use to overcome some of these constraints, their limitations, and further ideas on what might be done about them.

Issue areas discussed

1. Arable land fertilisation

The first resource constraint that was picked up by people was that of the difficulty of maintaining soil fertility in the arable areas. People wanted to know if there was a supplementary method of fertilising that was easier than the labour intensive digging and carting of manure and antheap.

We first led the discussion into the role trees play in contributing to soil fertility.

Those attending said that two main trees contribute to soil fertility in their area - the **muwonde** (*Ficus sur*) and the **muchakata** (*Parinari curatellifolia*). The points noted about each tree were as follows:

muchakata: The roots of the tree present no problem for ploughing as the tree is deep-rooted. However the tree is very slow growing.

muwonde: This tree is better for soil fertility than the muchakata. The muwonde is also faster growing. The major problem of the tree is that its spreading lateral roots are near the surface. However these can be cut, which also aids the tree's growth.

It was stressed that although planting these trees was a good idea, the benefit would be experienced only in the longer term - by our

children, said some of the older men present.

People were therefore interested in trees which could be of benefit in the shorter term. Places where trees could be planted were stated as:

i) on contours;
(ii) along the edges of fields;
(iii) along waterways.

Legumes were mentioned by us as woody plants which could usefully be grown in these places. *Crotalaria* was identified by people as one such local legume. However, it has no Shona name and people currently perceive it as a weed. They said that in fields it affects crops through direct competition, although it does not use much soil moisture.

2. Livestock and grazing

A problem that people identified was the fact that there was currently very little grass, although it was the time of the year when there should be a great deal.

Further points made by people were as follows:

- They do not have enough grazing land for their animals.
- Browse is primarily important from August to October when the young leaves of musasa and mutondo come out.
- Branches of trees such as mulberry and mushavi can be cut and fed to animals in dry periods.
- The most grass for grazing is found around people's main fields. These fields are used as part of a rotational grazing system, i.e. animals use them particularly around planting time and then later in the growing season (from March onwards). If there was more grass on the grazing areas, the grazing around fields would only be used after harvest.
- Some farmers identified the lack of cooperation amongst people in the establishment of grazing schemes as a problem.
- Others claimed some people were taking up too much land for their homestead areas.

3. Homestead areas

Around homes fruit trees can be grown in orchards. Only **peaches** and **mangoes** were mentioned as exotic fruit trees which can be intercropped. The comment was made about mangoes that they take a lot of water from the soil.

Two other trees were mentioned that can be planted around homes: **munzvirum'ombe** and **mutohwe.**

4. Tree planting and nurseries

A lively discussion took place on the subject of nurseries. There was consensus amongst those present that they would like a nursery for indigenous and exotic trees.

The discussion that followed was therefore about at what level was it appropriate for nurseries to be established. Two main suggestions were put forward:

(i) **At VIDCO level.** The advantages given for a nursery to be established at this level were:
- everyone belongs to the VIDCO;
- the VIDCO comes under the council and thus the plan can proceed upwards;
- the VIDCO can plan the nursery and allocate duties to the farmer clubs.

(ii) **At farmer group level.** Advantages given were were:
- people are nearer each other and thus it is easier to organise and manage nurseries.

Conclusion

It does not matter where it is as long as there is a nursery. One farmer group chairman stated that help for a nursery would have to be sought through the VIDCO. This did not mean in his opinion, however, that private nurseries or farmer club nurseries could not also be started.

Additional comments

1. We were underprepared for the response we obtained from people at the meeting. This was that we had been listening to them up till now. We had discussed with them as a group and visited some of them individually. Now that we understood some of their problems, they wished also to learn from us.

2. On this premise, the meeting would have been better carried out later in the design process, when technical aspects of the intervention could have been discussed in more detail.

3. Some ideas we were raising were difficult to communicate, e.g. the concept of a 'legume'. The use of simple posters, or diagrams on tracing paper, would have helped both to communicate ideas and to focus the subsequent discussions on them (instead of much of the discussion being at attempt to explain concepts).