Institutional materials on the Importance of Wealth Differentiation and Institutional Analysis in Agroforestry

Vupenyu Dzingirai

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PREFACE

The Agroforestry: Southern Africa (AFSA) project is aimed at capacity building in agroforestry training and research. It is a joint project of the Universities of Alberta (UA) and Zimbabwe (UZ), funded by the Canadian International Development Agency (CIDA) of Canada. AFSA is a University Partnership in Co-operation and Development Project (UPCD) managed by the Association of Universities and Colleges of Canada (AUCC). The lead institution at UA is the Department of Rural Economy while at UZ it is the Institute of Environmental Studies. A wide range of other departments are represented on the management committees, reflecting the interdisciplinary nature of the project, including the Department of Agricultural Economics (UZ), the Department of Soil Science (UZ), the Department of Crop Science (UZ), the Department of Public Law (UZ), the Centre for Applied Social Sciences (UZ), the Department of Renewable Resources (UA), and the Forestry Commission (Government of Zimbabwe). The aims of the project include:

- developing curricula materials
- improving the agroforestry knowledge base
- training graduate students
- developing library resources in agroforestry

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INSTITUTIONAL ANALYSIS AND ITS IMPORTANCE FOR AGROFORESTRY

Vupenyu Dzingirai

Centre for Applied Social Sciences, University of Zimbabwe

General Remarks

Before embarking on practical exercises on how to carry institutional analysis, students will be required to have some background knowledge on institutions and institutional analysis and how this applies to agroforestry. For this reason, this section is structured as follows.

* Background/ theoretical background
* Analysis and application of data
* Field based activities.

Objectives

By the end of the course, students should be able to: -
1) Understand what institutions are
2) Grasp what institutional analysis is
3) Appreciate the importance of institutional analysis for agroforestry
4) Undertake institutional analysis

Background

Agroforestry, which in Africa is an established and historical land-use practice (Mcgregor, 1991; 1994; Clarke, 1996; Rocheleau, et al., 1989; Wilson, 1990; 1988), is the deliberate combination of trees and crops, pastures or animals on the same land unit either at once or in sequence (Lundgren, 1982) to increase production while at the same time conserving natural resources (Campbell, 1993; 1991; Rocheleau et al., 1988). It is centred on three major elements, namely, natural resources, the users and institutions. In this lesson, we are concerned with the last of the three elements, namely institutions.

Institutions, which develop whenever humans interact with the environment (Berkes and Farvar, 1989; Gibbs, 1989), mediate between natural resources and users (Thomson and Freudenberg, 1987). Partly arising out of a realisation that resources are finite and that individuals are essentially individualistic, institutions are an attempt by users to rationalise as much as to regulate the use of common property resources (Wade, 1985). Put in another way, institutions are instruments for rationalising the use of natural resources.

Institutions or institutional arrangements are varied. They comprise those rules which define the resource, how it can be used, when, where, how, by whom as well as what to do with those who violate these rules (Thomson and Freudenberg, 1997; Murphree, 1997; 1992; Ostrom, 1990;

Gibbs and Bromley, 1989). They also provide the tenure and, sometimes derive from the tenure under which particular resources are used (Lawry, 1990). Institutional arrangements may also include organisations that exist to regulate resource use (Thomson and Freudenberger, 1997).

Whether in agroforestry or other forms of resource use, institutions give rise to specific forms of human behaviour which impact on natural resources (Ostrom, 1990; Runge, 1985). Rules may provide motivation for natural resources management. For example, it has been noted that where rules protect the interest of the individuals or private group against those of outsiders, they tend to offer compelling incentives for resource management. This is clear in the case of Campfire where some producer communities have supported wildlife management after being defined sole beneficiaries of wildlife management. (Dzingirai, 1999; Murphree, 1992). Just as they offer incentives for conservation, rules may offer disincentives for resource management. For example, rules that forbid people to have access to the products of their trees may reduce commitment to tree conservation (Lai and Khan, 1992; Peluso, 1990). Clearly at any given time, an array of rules determines the users' interaction with natural resources.

Institutions can derive from a variety of sources and different processes. As forestry experience from most African states has shown, the state can make institutions, which are then imposed or superimposed, on communities (Sithole and Bradley, 1995). Such institutions, which are both externally derived and driven, often do not have sufficient legitimacy to command the respect of communities who inevitably violate them. (Peluso, 1990; Rocheleau, 1987).

Alternatively, institutions can derive from communities. Most of the persistent rural institutions that are central in agroforestry are very often the brainchild of communities who build these based on past experience. Especially in Africa, communities are, however, not homogenous and undivided (Campbell, et al., 1999; Murombedzi, 1994), and this often results in the processes of institutional formation being dominated by dominant members of the community (Ribot, 1999; Madzudzo and Dzingirai, 1999; 1995; Fortman and Nabane, 1994; Mukamuri, 1991; Netting, 1992). Nevertheless, experience has consistently shown that institutions that are community driven or, at the very least, constructed in partnership with communities, yield good environmental and developmental results (Murphree, 1992).

This is by no means a comprehensive source of institutional arrangements. There are many other sources and processes by which these institutional arrangements come to be and are modified. What is important to trace in this discussion is that institutions are a highly contested arena (Madzudzo and Dzingirai, 1996; Sithole and Bradley, 1995), which is not surprising given the fact that they can be and are very often the basis for accessing natural resources. With this background on institutions, we may now move to the more practical discussion of institutional analysis, what it is and how it should be conducted in agroforestry.

Institutional Analysis

In agroforestry, institutional analysis can be defined as a programmatic and analytical tool or activity which project staff, academics and communities undertake, usually in a participatory fashion, in order to get information on the scope of institutions that have a bearing on planned or existing project (Thomson and Freudenberger, 1997). It refers to a processual identification of

the appropriate rules governing access to agroforestry resources in a given community. The analysis also focuses on examining whether these rules constitute an incentive to agroforestry or otherwise. Also, the analysis focuses on the process by which these rules are made, again asking the pertinent question whether and in what way the process provides incentives or disincentives for agroforestry conservation. However, the analysis also focuses on the, characterisation of the tree resource, in particular where the trees are located and the kinds of incentives that arise out of such location.

Institutional analysis also examines the 'resource community' itself, which includes both the core group and sometimes other users directly influencing the agroforestry resource. The latter may or may not be located in the same territory as the resource itself. The analysis focuses on the structure of the community, its religion, culture and how it is politically and socially organised. The analysis at this stage seeks to find out the way social organisation relates to agroforestry. The second part of the analysis examines a myriad of choices resource users make when confronted by various incentives. These choices result in patterns of resource use. Depending on how users weigh the incentives and disincentives, they will proceed to either use or not use resources. The analysis will also examine further the impact the choice has on the resource as well as on the kinds of actions of others in the community.

The third part of the analysis examines the overall impact of individual or community action on the forests and trees and what needs to be changed in order to have successful agroforestry activities. In general terms, this activity involves examination of the rules, the community and the resource itself to see what exactly needs to be changed, and how?

The activity is not an academic one. For strategic reasons, both the community and practitioners work together in discussing the impact of resource use and what needs to be done. The community is involved because, living with the resource, it has detailed information of its area, and is better informed to comment on the state of the resource overtime (Rocheleau, 1988; Chambers, 1983). Similarly, practitioners, who may or may not be originating from the resource community, are important because they have general professional experience on forestry and agroforestry issues and usually can predict the impact of some forms of resource use (Thomson and Freudenberger, 1999).

Importance of institutional analysis in agro-forestry

Some environmental experts often isolate the individual as the problem in resource management. Often this approach results in the enactment of rules and legislation whose effect is to bar the individual from accessing the resources in question. It is now known that such approaches do not work and merely worsen environmental problems (Peluso, 1992; 1989). Within agroforestry contexts, a proper institutional analysis can provide communities and project personnel with a far more sophisticated understanding of development processes and the real constraints to implement improved resource management strategies. By making recourse to institutional analysis and analysing present legislation governing resources use, one can find a sense in which the legislation, for example, may unintentionally constitute a disincentive to natural resources management.

Institutional analysis focuses on the characteristics of the natural resource in a given context. It examines whether the resource is open to all people, its location, and the impact this might have on its conservation. Since it involves a detailed examination of the characteristics of the resource, the community and the rules themselves, institutional analysis can also inform communities and project staff about a proposed agro-forestry's chances of success even before it gets under way or why an ongoing project is not making progress?

Institutional analysis also focuses on the examination of national projects and legislation and the impact these have on resource management. Institutional analysis can therefore clarify which national projects or rules are influencing community forestry decisions and what option is available with or without national change. Where rules that forbid people access to trees on their homestead exist, institutional analysis will be able to pick these up quickly from a basic discussion with communities.

Institutional analysis, if properly understood and conducted, can create a fruitful difference for agroforestry. The selected readings below which are designed to clarify the issues of institutional analysis. You shall, for the most part, be encountering projects and programmes that have floundered or done better because institutional analysis, or some element of it, was accepted, rejected.

Readings Reading #1

Sithole, B. and Bradley, P. 1995. Institutional Conflicts over the Management of Communal Resources in Zimbabwe. Stockholm Environmental Institute.

(a) Can you identify the range of institutions that are involved in communal resources man agement and agroforestry in Zimbabwe?
(b) What are the responsibilities for each institution? Can you notice areas of complementarily both method and objective of different institutions? What, in your view, are the impacts for such institutional conflict? Can you think of why these conflicts continue and perpetuate over time?
(c) Using material from this reading can you suggest ways these institutional conflicts can be resolved.
(d) Given these conflicts shouldn't the concern be to build one perfect local and indigenous institution?
(e) If multiplicity of institutions is not only inevitable but also desirable, what are the kinds of steps required ensuring that agroforestry success is assured?

Reading #2

Fortmann, L. and Nhira, C. 1992. Local management of trees and woodland resources in Zimbabwe, Chapter 5.

a) What exactly is 'sacred control'? Throughout the chapter, the authors mention a number of examples of these sacred controls can you list them?
b) Consider this statement:

...management of indigenous woodlands involves varying combinations of...management mechanism over time and different places. No single management institution is effective in all situations' p13

Can you think of contexts under which these sacred conditions work best? What are the 'times' where these controls expectedly work best?

c) From the material presented in this chapter, can indigenous institutions be relied upon in conservation? What are the additional institutions that are required to bring about effective resource management?

d) What can you generally say about traditional institutions in relationship to agroforestry? Under what conditions should these be relied upon for effective resource management?

Reading #3

Cook, C. and Grut, M. 1998. Agroforestry in Sub-Saharan Africa, Chapter 3, p21-24, 40-44.

a) You should be able to identify the reasons why the agroforestry project came into being and why locals welcomed tree growing. What are the uses to which the trees were put to?

b) Besides the community, what are the major institutions that you can identify? Who is the district forestry Officer and why did CARE collaborate with him in agroforestry? The author remarks that the CARE project aims at strengthening local knowledge of indigenous agroforestry systems. What are those indigenous practices that would require strengthening and why? What is the significance of ICRAF in this project? Would the project have achieved different results if it had not made use of ICRAF and its resources?

c) What are the strategies employed by CARE to distribute and introduce new agroforestry? Can you comment on the significance of employing local groups as intermediaries to introduce new agroforestry practices?

d) What are the services offered by CARE? How can you justify why CARE staff did not work closely with the forestry department? What are the kinds of support that the CARE project would have enjoyed from government other than those relating to the continuity of the project?

e) CARE made use of existing local groupings. What are these and what difference did they make to the project?

f) What strategies were adopted to ensure that chiefs played a part in project activities? In addition, what roles do you think chiefs played?

g) The media can play a role in development activities. What role did this institution play in the project?

h) Can you think of additional institutions that are needed to enhance project success? From this relatively successful case study, what general point can you make about institutions in relationship to tree growing?

Reading # 4

P Dewees, 1993. Social and economic Incentives for small holder Tree Growing: A case study from Muranga District in Kenya. Community forestry Cases Studies Series

a) What are the uses of the tree in question and why is it an ideal agroforestry species? What were additional arguments by government for introducing the tree in early 1900?

b) Why did rural farmers resist the early push for wattle cultivation?

c) Wattle was processed outside Kenya. In what way might this have dissuaded farmers from growing the tree in favour of other crops?
d) Why did wattle cultivation result in labour migration? What were implications for such migration on (i) wattle tree cultivation (ii) on communities themselves?
e) Can you explain why in the early phase only the educated elite and chiefs grew this tree? What were the chiefs' and the educated elite's major sources of labour?
f) The wattle is a permanent tree. Why do you think landlords were reluctant to allow tenants to grow this tree? Why did litigation ensue between tenants and landlords growing this crop?
g) 20 years after it started, wattle cultivation stopped. Can you locate the reasons that gave rise to this change? Why did the growing of coffee appear attractive? From the viewpoint of institutional analysis what should have been done to ensure the survival of wattle growing?

Reading #5

Lai, C. and Khan, A. 1992. Forestry policy in the Sahel: Institutional constraints on social forestry in Mali. In: G. Sherpherd (ed) forest Policies Forest Politics. ODI Occasional Paper 13.

a) What were the problems Mali forestry policies sought to correct?
b) How and why were the institutional and structures for tree management formulated? How and why do locals view forestry department? Can you itemise the rules governing tree use?
c) What are permits and when are these required? What is the price for not conforming? Who and in what manner benefits from such fines?
d) What has been the overall effect of such regulation on the people and forestry?
e) What institutional modifications are required to have an agroforestry programme in Mali?

Reading #6

Sebedi, B. et al., 1993. Tree and Land Tenure in the Eastern Terrai: A Case study from the Siraha and Sapatri Districts, Nepal.

a) Why are trees important in these two districts? What are the major sources of tree products for both the poor and the rich?
b) There is smuggling of trees and tree products. Why would poor people, particularly the landless, rather smuggle than grow trees on the land they settle?
c) There is encroachment of people into state land. Can you think of the reasons why both the wealth and the poor disregard government calls to conserve forests?
d) The author introduces two important concepts: treelessness and landlessness. What exactly does he mean by each concept? What are the rules that create treelessness in this area? What are the social groups that have had no trees for generations?
e) Throughout the text, the authors argue that farmers in Nepal tend to grow trees on land on which there is no confusion about rights? What exactly do they mean and can you give instances of such rights confusion from the reading and from your personal experience? What are the sociological and ecological implications of such ambiguity of rights?

Reading # 7

Peluso, N. and Poffenberger, M. 1989. Social Forestry in Java: Reorienting Management Systems.

a) What is the major forestry institution in Java? Why is the state interested in the management of the resources? Why is it configured in this manner?
b) How are natural resources, particularly land, distributed?
c) What is the impact this distribution has on land? Why has the state met little success in improving the welfare of people in forestry communities? What are the kinds of changes that are required to bring about success in forestry programs in Java? How feasible are these changes?

Reading # 8

Hobane, P. 1994. Amancimbi. The gathering, processing and consumption and trade of edible caterpillars in Bulilimangwe District.

a) In the areas discussed there is environmental degradation. What is the dimension of this degradation? In what way does it arise from the nature of the management rules, the community and the resource itself?
b) Immigrants and business people are cited as responsible for environmental damage. How and why do these people pose an environmental damage? How can this be reversed? Why are traditional rules failing? Why are modern rules also failing to stop environmental damage?
c) What behaviour and community changes are required to secure the future of the caterpillars and the mopane trees? The author suggests mopane tree conservation is under steady threat. How can these trees continue to survive? From a viewpoint of institutional analysis, what modification to the resource characteristic should be made to ensure its survival?

Reading # 9

Makuku, S. 1993. Community Approaches to in Managing Common Property Forestry Resources: The Case of Norumedzo Community in Bikita.

a) What exactly is a jiri?
b) Explain who the major beneficiaries of the jiri are. What are the factors that threaten the jiri? How does the community ensure the conservation of this jiri?
c) Why do members cooperate in the conservation of these resources? How does history and shared culture play a part in the conservation of the jiri? What is the cost for violating the rule?
d) What are the recent changes in the political and social structure of the community, which might threaten conservation activities in the area?
e) From an institutional analysis perspective, how might the future of the jiri be safeguarded, in your view?

Field Exercise

This exercise is meant to test your knowledge and understanding for institutional analysis and whether you really can carry out an institutional analysis.

Choose a community where a community agroforestry project already exists. For effective learning purpose, it is recommended that the project must be performing badly. It is not mandatory that

you carry a PRA exercise. A questionnaire survey or participant observation can also be used, provided that these instruments are done with the respondents. You need however to find a way of incorporating people, both rural people and other resource users in the exercise.

(i) First, identify the characteristic of the resource itself. What are the characteristics of the natural resource, which might be discouraging people from taking part in it? What are the incentives?
(ii) Identify the rules that govern the use of the forestry products. Can you characterise the rules; i.e. what sort of disincentives emanates from the rules?
(iii) Examine the community, its social and political organisation. Is there social/political stratification? In what sense are these attributes of the community a disincentive to agroforestry participation and management? Who might be benefiting more from the resource?
(iv) What is the overall impact of i-iii above on the resource? Are there any secondary impacts you can discern?
(v) Suggest, indicating whether this is feasible or not, the kinds of changes that are required to put the project back to life. Focus on the following:
    (a) changes to the rule structure
    (b) changes to the community structure
    (c) changes to the resource itself

WEALTH DIFFERENTIATION AND ITS IMPORTANCE IN AGROFORESTRY

General Remarks

Before practical exercises, students will require a certain amount of background and theoretical reading on wealth differentiation and agro-forestry, minimally defined as the deliberate growing of trees on crop fields and rangelands to increase productivity (Nair, 1993).

This instructional material is structured as follows.

- The objectives
- Theoretical issues on wealth differentiation
- Readings/Seminars
- Field-based activities
- Application of wealth and differentiation related data/material.

Objectives

By the end of this topic, you should be able to:

1. Have an idea of wealth differentiation and its determinants
2. Understanding tree growing patterns among social groups
3. Identify the poor and the wealthy's view on agro-forestry
4. Understand why the wealthy find it sensible and affordable to grow trees
5. To design a successful small scale agro-forestry programme

Background in theoretical and substantive issues

That rural societies are socially fractured is a point widely accepted by rural sociologists working in Africa (Cousins et al, 1990; Chambers, 1992). Everywhere, except for hunter-gatherers (Cheater, 1987), communities are divided with some members having adequate resources (e.g. livestock, labour, agricultural equipment, formal education and income) while others are illiterate and poor with very few resources to independently reproduce themselves (Mararike, 1999). In many instances the poor survive by making themselves clients to the richer members of the society (Madzudzo and Dzingirai, 1996).

There is, however, no agreement among scholars about when this differentiation according to wealth started. Some say that wealth differentiation started in the colonial era (Cousins, et al, 1990; Adams, 1987). Others allege that wealth differentiation has a long history and predated colonialism (Ranger, 1985; Cheater, 1991). Whatever ideas they have about differentiation and when it started, rural sociologists share the view that wealth differentiation arises as a result of interaction of traditional society with the external world. External trade, wage labour, access to credit and finance are some of the factors which are agreed upon by sociologists to be at the core

of rural differentiation (Cousins, et al, 1990; Nhira, 1993; Ranger, 1985). These factors work, of course, in conjunction with internal ones which include, knowledge (House, 1997) ecology, and household structure. Whatever the factors giving rise to stratification, sociologists share the view that different socio-economic groups relate to agro-forestry in diverging ways.

From the past, rural farmers have, notwithstanding resistance from the state (McGregor, J 1991;Wilson, 1989; 1990), persistently regarded growing trees on homesteads, farms and grazing land as a strategy to improve both yields and the environment. (Campbell, et al., 1991). But even though trees have been equally regarded by the poor and the wealthy (Fortmann and Nabane, 1992), the degree to which these different social groups practice agro-forestry varies (Fortman and Nhira, 1992). Most academics, particularly those reputable in the discipline, agree that wealth influences the degree to which rural people deliberately grow or keep trees on homesteads, farms and grazing land (Rocheleau, et al., 1988; Goebel, 1997).

That the wealthy show more enthusiasm in agroforestry than the poor can be gleaned from Fortman and Nabane (1992). Using the case of Mhondoro Communal Lands in Zimbabwe, the authors point out that poor people, while regarding tree growing as crucial, rarely take part in the planting of trees in community woodlots. According to the authors, the fear that the wealthy members as well as the state ultimately monopolises the communal benefits, whether grazing or poles, influences the poor to be less enthusiastic about participating in collective tree growing. This argument is supported by studies carried elsewhere (Clarke1996; FAO, 1993; Murombedzi, 1993).

Burfod (1989) seems to suggest that it is not the perception of who will monopolise the benefits, but rather the unavailability of supporting income that influences the poor to show less enthusiasm about tree growing. The author points out that agro-forestry is, by its very nature, an involved activity, that requires a considerable capital outlay for it to start up. Money and time is needed to buy seeds, chemicals and fencing material. For the author, only the wealthy (or at least those with remittances) have the income to take care of the trees.

A related argument comes from FAO, (1993) and Campbell, et al., (1991) who suggest that labour availability is a key determinant in tree growing. According to them, tree growing requires labour, for watering, protecting and even harvesting of produce. The considerable labour demand for agro-forestry is such that it is the large households, usually the wealthier (Cheater, 1984) who end up growing trees on their homestead or farms. Alternatively these are households which, although small, are able to command the labour of those who are economically, ideologically or politically vulnerable (Mukamuri, 1995). But while this view is seductively simple, it fails to acknowledge the possibility that even the wealthy can in fact be the source of material support for the poor in the sphere of agro-forestry (Netting, 1992; Moore, 1996).

There is another reason why the poor do not participate in agro-forestry. Researchers point out that agro-forestry is a technical activity which demands some degree of education (FAO, 1993 du Toit, 1984). Because the poor are usually not educated and lack the capacity to interpret the technical requirements of tree-growing, they usually opt not to grow them. FAO (1993) provides the example of Peru, where one semi -educated community resisted earlier initiatives by the state to grow trees because it was not literate enough to master the requirements of eucalyptus

growing. Thus because of the technical requirements of tree-growing, it is only the educated wealthy people who end up growing or keeping trees on their homesteads or fields.

Dzingirai (1992) adds another dimension why agro-forestry and indeed all agriculture tend to be the domain of the wealthier households. Extension workers often employ methods, which only the rich are able to take advantage of. Usually, courses on agro-forestry are conducted in English which means that it is those who are literate, the wealthy elite, who take advantage of such initiatives. Moreover, extension workers, owing to limited funds, often conduct their workshops at business centres, away from the villages (Burford; 1988). This means that only the rich who are able to pay for such agro-forestry and other workshops end up enjoying such initiatives. Similarly, extension workers are permanently based at growth points and service centres which means only the wealthy can access them for backup service. The suggestion from all this is that it is the well to do who end up participating in agro-forestry. Which is an irony because the poor who can not access these services are the ones who need agroforestry in order to break out from the poverty circle.

For others, the poor's inability to capture the market for their products is an important factor explaining the failure to take part in agroforestry. Usually the poor lack capital, knowledge and resources to mobilise labour and transport products to market. Sometimes they try to make use of intermediaries or middlemen who also cheat them (Hobane, 1995; Mcdemott and De Beer, 1989). This is not so with the wealthy people who may even have their own transport system or access to loans to finance their marketing activities (Arnold and Falconer, 1991).

While some sociologists disagree on the effect of the market on agro-forestry by pointing out that the poor dominate in the marketing of forestry products, very few serious scholars would doubt the importance of land availability in agro-forestry. According to FAO (1984; 1991), agro-forestry is predicated on the availability of land. Those who lack or have very little land and have no other forms of earning a living, often find it risky and insensible to set aside land for tree growing. As FAO 1985:25) aptly remarks:

Trees may be seen as a resource to be sacrificed to meet more urgent household needs

An example of this would be Zimbabwe where because of unemployment and the growing scarcity of land, peasants are not only fighting among themselves, but cultivating every available land, leaving no places for trees (McGregor, 1994; Moyo, 1995; Dzingirai, 1999). Elsewhere, similar cases have been observed (Rocheleau, D et al, 1998; Nair, 1993; Staver, 1989).
In contrast those who have surplus land actively take part in agro-forestry and their fields are often the sites of trees of all sorts. Because they have extra land on which to grow food, the wealthy can afford to devote portions of their land to tree growing, which in turn increases their income (Anord and Perez, 1998).

Nor is it a matter of availability of land alone that affects adoption of agro-forestry. Tenure issues come into the picture as well. Farmers who own land find it both sensible and strategic to plant trees on their land (FAO, 1985; Nhira, 1994). Such trees improve land productivity as well as make effective the owner's claim to land. In contrast, the poor who are tenants to landlords, often find it discouraging to grow trees on land from which they can be evicted anytime. Indeed

in some cases, the wealthy landlords do not permit tenant to grow trees on their property, as doing that will be a challenge to their ownership.

This literature review, then, stresses one point, namely that the disposition and actual commitment to tree growing are related to one's wealth. The poor people, who most need agro-forestry to improve themselves (Falconer and Anorld, 1991; Campbell, et al., 1997 Dewees, 1992; Clarke, et al., 1996), are unable to afford its requirements. You shall be encountering this point in its various forms in the readings that follow.

Readings

Reading # 1

Campbell, B. et al., 1997 Forestry Activities and extension in the communal areas of Zimbabwe, pages 77-91.

The reading should provide evidence about how extension agents are biased towards the wealthy members of the society.

(i) Try to identify the range of forestry extension activities.
(ii) Who and why are the people that benefit from these extension services?
(iii) How does this differ from the ideology of the Commission?
(iv) Why should the staff from forestry Commission focus on the wealthy people like retired civil servants, master farmers, etc?
(v) Why do the poor fail to attend meetings? Or get free inputs? Why do they not emulate the rich?
(vi) Towards the end, the authors suggest that extension must be reformulated so that the poor members benefit equally from extension. Based on the material from this study, suggest how such a reformulation may look like.

Reading #2.

Fortmann, L. and Nabane, N. 1992. Poverty and Tree Resources in Mhondoro: A research Note. CASS, UZ This section requires that you have some basic understanding of group woodlots.

(i) Why do the authors think that trees are important to both the poor and rich?
(ii) What is the implication of this importance for resource management?
(iii) Is there any substantive difference in the way the rich and the poor plant trees? Why is this so?
(iv) Why do the poor show less enthusiasm in participating in collective tree growing?
(v) Comment on the observation that the poor refuse to participate because the rich monopolise management benefits.

Reading # 3

1. Tree growing by rural people FAO Forestry Paper, (1985) No. 64 pp23-31;
2. Peasant participation in community Reafforestation. FAO (1993) Community Forestry Series, No. 7. (pp13-23)

The readings are on land availability and tenure. These readings requires some knowledge of fallowing and tree-scattering, two agroforestry practices found in Africa.

(i) The first sections are general. Try to identify what the author recognizes as 'pressures' to tree growing.
(ii) In what way is tenure related to poverty?
(iii) Within the context of tenancy, why should the landless be reluctant to grow trees on the land they occupy?
(iv) The authors mention something about land scarcity. Why should farmers with very little land consider tress as something to be sacrificed?
(v) The last sections are novel. Why should landlords or real owners of land refuse their tenants to grow trees?
(vi) Can you think about why landlords should continue to have long fallow periods and why they should continue to have trees scattered in their fields?

Reading #4

Agro-forestry in sub Saharan Africa (Agro-forestry in Northern Nigeria pages 29-31.

The reading discuss the labour requirements for a particular agro-forestry practice widely practiced in Nigeria. A reading of this material should immediately convey to you why it is only the wealth who can afford to participate in agroforestry of this kind.

(i) What are the main features of alley farming in Nigeria?
(ii) Why was alley farming introduced?
(iii) What are the labour requirements of this agro-forestry activity?
(iv) Identify the complex and precise activities that have to be done in order to have alley a success.
(v) Which households, sociologically, are likely to have such management capacity as well as the ability to hire additional labour?
(vi) Can you locate reasons why on station farm trials were a success compared to on farm yields? Consider this remark from p30:

> *Alley farming has been readily adopted by resident villagers who own or have access to more than average amounts of land...and by older wealthier farmers whose farming and off farm activities are already diversified, caushioning the risk entitled in adopting a new farming technique.*

Can you think of what those off farm activities are? What 'risks' does the author has in mind? From the evidence in the text, how significant is the risk? What are the extension requirements for this activity. Can you pick up evidence in this reading and others to suggest that the extension only benefit the wealthy?
Can you see the sense in which existing tenure prohibits alley farming by the poor?

Reading # 5

Scoones, I. 1988. Community management of indigenous woodland project: Zvishavane and Chivi Districts, Zimbabwe. Harare: ENDA.

This reading requires some understanding of the deliberate and intensive planting of woody plants in dry land pastures. It also requires some understanding of the purposeful protection of woody plants as a strategy to increase livestock production.

(i) Why should rural farmers produce woody plants combined with pastures or rangeland?
(ii) Why in particular should the wealthy cattle owners be inclined to put more effort in such practices?
(iii) Why should the poor be reluctant to participate in such agro-forestry?
(iv) What and in what ways are the major obstacles to the production of fodder trees in pastures and rangeland?
(v) Why should those who are not wealthy be reluctant to produce woody plants in traditional grazing area?
(vi) On the basis of this case study, can you make a general statement about the conditions under which rural livestock farmers will adopt such agro-forestry practices?

Field exercises

The aim of the exercise is to enable you to put into practice what you would have learnt in the readings above. Keep in mind the point that, in general, the disposition and actual commitment to tree growing are related to one's wealth. The field trip and exercise should enable you to make linkages between wealth and agro-forestry practices.

(i) Choose any heterogeneous rural village located in a semi arid and populated area. You may want to settle for other areas, but Chivi, Zvishavane and Mhondoro may be feasible for your purposes. These areas have been researched already and have accessible background data that you may require.
(ii) Whatever your choice, make 2 transect walks across the village and the arables, observing the following.

- Homestead trees
- Farm trees.

Mark and locate all the homesteads with (a) many trees on both the homestead and field, and (b) those household with few or no trees on their properties. It may be useful at this stage to observe not just the number of trees but the manner in which these are maintained. Are the trees fenced? Are they pruned and well looked after? (I would suggest that you sketch the village map and write extensive notes and diagrams during this transect walk)

(iii) Do a comprehensive survey on socio- economic characteristics of the villages. Here you may want to use PRA if already familiar with it. (I recommend this because of your limitations in time and resources) Or you may want to run a proper socio-economic survey (which is obviously ideal for quantified data). Whatever path you take, classify or group households according to a wealth criterion. I suggest you come up with two categories one made up of wealthier members and the other of poor people.

(iv) From your household typologies, identify the poorest of the poor. Can you see any behavior with respect to tree growing? Refer to your transect notes.

(v) Repeat the exercise for the wealthy households. Can you see any general practice or pattern in respect of tree growing or tree cultivation? (Refer to your transect notes and diagrams).

(vi) Select a manageable number of wealthy households (I would choose 5) and conduct detailed interviews on why they do not generally grow trees.

(vii) Repeat the same exercise with a group of poor people, asking them their problems with tree growing and keeping.

Based on the results of your project, can you suggest a viable agro-forestry policy for this small village?

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