CHAPTER 3

ETHIOPIA'S SITUATION: PROCESSES AND STRUCTURES

3.1 INTRODUCTION

> *" Population and rural development relationships are modulated by society-specific patterns of social organization and by the rules and routines of economic and political behaviour, in short, by the society's institutional structure. To ignore this structure is to assume that institutional patterns are uniform and constant across societies or change indeterminate."* (McNicoll and Cain, 1990:3)

The fact that rural livelihoods decisions at household and community level concerning farming, livelihood diversification, migration and reproductive choice are influenced by organisational and institutional factors, market conditions and technology was well elaborated in Chapter 2. Furthermore, views regarding organisation, institution, market, technology and the overall policy environment needed to strengthen local strategies and to create an enabling environment for sustainable rural livelihoods were also deliberated upon at length in chapter 2.

This chapter critically reviews the land tenure institution, institutional and organisational factors in NRM, and smallholder farmers' access to the market and appropriate and profitable technologies, and the overall policy environment of the country. Understanding the evolution and salient features of the country's specific institutional and policy settings facilitates the subsequent analyses of rural livelihood strategies and appropriate interpretation of findings of the study. In other words, it helps to comprehend and explain how the prevailing structures and processes condition (facilitate/constrain) local livelihood strategies and influence human welfare and sustainability outcomes. It is appropriate to place the review in a historical perspective as the prevailing rural livelihood strategies and, human welfare and sustainability outcomes are the cumulative results of the past as well as the present specific settings of the country.

The conclusion drawn from the review in the final section of the chapter will reveal that a lot remain to be done to do away with the uncertainty related to the right to land, to improve the strategies for NRM, improve smallholder farmers' access to the market and to strengthen and make the national technology generation and dissemination systems demand-driven and client-oriented.

3.2 EVOLUTION OF THE LAND TENURE INSTITUTION AND UNCERTAIN RIGHTS TO LAND

Ethiopia had one of the most complex and the most change resistant land tenure system until the 1974 revolution (Cohen and Weintraub, 1975). The *rist* system (communal ownership) and the tenant holding (sharecropper arrangement) were the two most common ones. However, the tenancy system was the commonest particularly in the south (Rahmato, 1993), including the HHs.

The northerners, the Amhara and the Tigre descendants, who conquered peoples of the south, mainly the Oromo, during the Minilik II became the landlords who determined distribution of plots and security of holding (Cohen and Weintraub, 1975). After Minilik's conquest, substantial proportion of communal forest and grazing land were converted into *de jure* crown land or distributed to officials, soldiers and supporters of the Abyssinian emperors. The tenants, the indigenous peoples of the south, became "virtually an outcast in its homeland and culturally subordinate as well" (Rahmato, 1993:248).

In this classical feudal land tenure system, the absentee landlords made little contribution to the production process, but expropriated as much as half of the harvest of their subjects via rent, tribute and taxes (Cohen and Weintraub, 1975). The tenancy system was stagnant, exploitative, insecure and serious impediment to progress (Rahmato, 1993). Singh summarised the situation as follows:

> *"The landlord elements and the bureaucrats were out to 'appropriate both human and natural resources'. - - - The peasants no longer had access to traditional natural resources, and the tie between him and the local environmental resources snapped. For his bare physical survival, he actively and consciously began to 'mine' this resources." (Singh, 1998: 302-303)*

The March 1975 land reform was successful in abolishing the archaic and exploitative feudal land tenure system in rural Ethiopia. It made land the 'collective property of the Ethiopian People' or to make it clear 'state property', and gave the former tenants and all others who were willing to cultivate the land personally usufructuary right with holding size ceiling of 10ha. The policy prohibited private ownership of rural land and transfer of use right via sale, exchange, mortgage, lease or any other means (Rahmato, 1984). The Peasant Associations organised after the land reform were empowered to undertake periodic land redistribution and land administration. The land allotment committee of respective PAs distributed land of different qualities to all rural households based on family size. Yet, the land reform was not successful with regard to ameliorating uncertainty related to the right to land since farmers had no fixed agreement or contract with the state. Mammo (1999) argues that the reform indeed disempowered smallholder farmers and gave the central government power to pursue whatever rural development strategies it saw would fit regardless of support or opposition from the former.

Besides, although it is generally accepted that the land reform has effectively achieved its equity objectives and resolved the previous land related ethnic conflict, eviction through villagisation, cooperativisation, establishment of large-scale state farms, involuntary resettlement and national parks affected millions (Rahmato, 1994). The eviction and marginalisation of smallholder farmers coupled with the frequent periodic land redistribution by PAs to accommodate the demand of households established after the first round land redistribution for agricultural land led to land fragmentation and land tenure insecurity. This had a disincentive effect on the growth of production and productivity (Adal, 1999). The land policy is further believed to discourage both rural-rural and rural-urban migration. This was due to the fact that access to rural land according to the policy was based on residential area and non-use and/or a long absence would result in the loss of use right.

Moreover, the land policy hard hits the communal pasture and natural forest. The policy, like its predecessor, alienated the local people from the common resource. The indigenous common property regime use and management systems were destroyed. No viable alternative was, however, put in place to effectively enforce

sustainable NRM at the grassroots level. This led to the conversion of the common property regime into *de facto* open-access.

The current Ethiopian People's Revolutionary Democratic Front (EPRDF) party led government has made no fundamental change on the land policy of its predecessor. The limited changes that have been introduced include easing the restrictions on hiring of labour, leasing land, transferring usufruct right to legal heir. In the 'new' land policy, state ownership of rural land has been retained and even made a constitutional issue. The following excerpt from a seminar opening address by the country's Vice Minister of Agriculture illustrates the issues at stake (Ejigu, 2000: XI). *" All land is property of the state and it may not be sold or mortgaged. The constitution guarantees that rights of individuals to improvements they make to land, including the right to bequeath, transfer, remove or claim compensation for such improvements if the right to use expires."*

In addition, the land policy in effect envisaged the continuation of periodic rural land redistribution by PAs, leaving the land tenure insecurity problem unresolved again as apparent from the following excerpt taken from the policy. *" a rural land allocation measures taken at intervals, upon decision of the community, with a view to assigning holding rights in a fair and proportionate manner as well as to demarcating land for communal use by peasant." Article 2, sub article 4 (as cited in Adal, 1999:216)*

In general, smallholder farmers of the country have never, in history, been granted secured land tenure. The policy of alienating rural households and communities from the natural resource has never been changed since the regime of Minilk II. No attempt has been ever made to enable local communities to jointly use and manage state owned forest plantation. In fact, the vice minister indicated, in the opening address quoted above, that efforts were underway to issue land title certificates to ensure security of holding. This promise still remains unrealised! Nonetheless, land tenure security is a relative term. The extent of land tenure security can be judged by looking at its four components: excludability, duration, assurance and robustness (Roth, Wiebe and Lawry, 1993, cited in McCulloch, Meinzen-Dick and Hazell, 1998). Table 3.1 provides an overview of the extent of cropland tenure security in Ethiopia.

Table 3.1: An overview of cropland tenure security in Ethiopia

Tenure right	Extent	Remark
Use right	high	Includes the right to grow crops, trees and make permanent improvement
Transfer right	medium	Does not provide the right to sell and mortgage
Exclusion right	Medium	PAs have the power to confiscate the land.
Duration	Uncertain	Land redistribution can be conducted any time by PAs
Assurance	High	PAs can enforce an individual right to land

3.3 ORGANISATIONAL AND INSTITUTIONAL FACTORS IN THE NATURAL RESOURCE MANAGEMENT

The national government (including the previous) has pursued different strategies to ameliorate the adverse impact of rural livelihood behaviour on the sustainability of NRM in Ethiopia and in the HHs. The strategies include reforestation and soil conservation campaigns, regulations and provision of incentives.

In the past regime, most of smallholder farmers in Ethiopia participated in the planting of trees on deforested areas and on soil and water conservation activities on steeper slops in their respective PAs. The approach was, however, too top-down. The forestry department of the MoA often planned the campaign single-handedly without any consultation with the local people and enforced compulsory participation on the farmers through leaders of the respective PAs. For example, failure to participate in the campaign could result in financial fine or denial of access to service cooperatives' shops where goods could be purchased at a relatively lower price (Tefera, 1995).

The campaign failed to deliver the expected results. The failure was caused not only because of the top-down planning and implementation, but also due to the failure on the part of the concerned department to innovate the necessary institutional arrangements. Effective grassroots level institution that could enable the local communities to jointly use and manage the common property regimes was missing.

As a result, most of the plantations were converted into *de facto open-access* once established. Table 3.2 provides some insights into institutional problems in managing common property regimes.

3.2: An overview of forest and grazing land tenure security in Ethiopia

Tenure right	Extent	Remark
Use right vested in the community	High	Includes the right to grow crops, trees and make permanent improvement
Transfer right	Low	Does not provide the right to lease, rent, sell and mortgage
Exclusion right	Low	Open to anyone from and outside the community
Duration	Uncertain	Land redistribution can be conducted any time by PAs
Assurance	High	PAs can enforce group right

Included in the regulation were the law that prohibited cultivating land with gradients of more than 30% and restrictions on felling trees and trade in forest and forest products such as timber, fuelwood and charcoal. The later was enforced through checkpoints established for the purpose and commonly known as 'forest policing'. However, the regulation strategy did not produce the expected result. The major reason is that rural households continue to relay on forest and forest products for their energy demand in the absence of alternative sources of energy; as a source of income to supplement the insufficient farming income; and as a source of additional cropland to produce more for the growing population in the absence of improvement in the productivity of land.

Food for Work program was also used as an incentive to promote soil and water conservation activities. There are at least two theoretical explanations to justify this incentive strategy. First, the prevailing land tenure system is such that households are less willing to invest in soil and water conservation. Secondly, the high prevalence of rural poverty may lead to higher discount rate of future income and thereby divert attention from a long-term investment in the natural resource conservation to the gratification of immediate needs. The incentive strategy had produced better result than the former two strategies. Although some empirical studies showed that the conservation structures that were developed through FFW program was totally or partially removed by some households due to their vested interest in the continuation of the programs (e.g. CARE-Ethiopia, 1996), other studies

reported that the probability of maintaining the conservation structures developed through similar programs was higher on steeper slopes where households' perception of the erosion problem was high (Shiferaw and Holden, 1998).

3.4 ACCESS TO THE MARKET AND MARKET INCENTIVES

The problem of access to the market by smallholder farmers has three dimensions (IFAD, 2001): the physical (distance from market), the political (inability to influence the terms upon which to participate in the markets) and the structural (lack of market intermediaries). These indicators are used to briefly assess the extent to which the smallholders' have access to the markets in Ethiopia.

In the countrysides, infrastructure is poorly developed to facilitate smallholder farmers' access to the market. The country has one of the world's lowest ratios of road per person estimated at merely 90cm (van Braun and Webb, 1994). Many of the urban towns in the country do not have all weather roads connecting them to the surrounding rural areas. Only 20% of the country can be reached by modern transport (Lirenso, 2000). Usually farmers have to travel for hours and days on foot carrying their produce on their backs (women) or heads (men) to sell on the market and to buy inputs and consumables from the market. The non-availability of consumer goods in rural areas is by itself discouraging for the commercialisation of smallholder production. "*Farmers in Ethiopia received a mere one-third of the final price, compared to Asian farmers who got 70 to 80%. Marketing chain often took 20 to 30 days to go from producers to consumers, which, otherwise, could take 2 to 3 days, if there were enough road structure available.*" *Gebre Medine, 2003 as cited on Addis Tribune news web page.*

The enormous gap between farm gate prices and consumer prices is the indication of market inefficiency and high transaction costs. It is not uncommon in this part of the world to have surplus grain with very low prices at one corner of the country and deficit or even famine with exorbitant prices at other corner of the country. This is mainly due to the poor road condition and higher transport cost. The fact that the income of the urban and rural people, particularly in the food deficit areas is very low also means that effective demand for agricultural produces is equally a serious constraint. Besides, smallholder farmers have no price information and the majority of

them are illiterate. Farmers usually dispose of their produce at offered prices and are often cheated on the weighting scale.

Moreover, between 1975 and 1990, smallholder farmers were required to sell part of their produce (given quotas) to the government Agricultural Marketing Corporation (AMC) at artificially low prices. The marketing board through license requirements and grain checkpoints intentionally limited interregional grain trade. On the other hand, high inland transportation costs of inputs such as fertilisers ranging from 22% to 68% of the CIF cost (cost at port of entry) of DAP (Diammonium Phosphate) and urea (Howard *et al.*, 1999) has made the use of chemical fertilisers beyond the reach of many smallholder farm households. This would mean low adoption rate of fertilisers and low productivity. Haile Gebrial (2000) summarised his observation as follows: " - - - *in the process, peasants carry the burden of marketing inefficiency twice over, that is, as buyers of fertilizers and as sellers of grain.*" (Haile Gebrial, 2000:108)

The government has since the early 1990s removed the official barriers in grain marketing, abandoned interventions in pricing of agricultural produces and dismantled most of the former AMC's local branches. AMC played a major role in input provision, enforcing grain quotas and fixing prices. The agricultural market liberalisation process has accelerated following the Structural Adjustment Programs (SAPs) spearheaded by the World Bank and the IMF. The trade liberalisation coupled with devaluation of the Birr and, presumably, reduction in export tax following SAPs was generally expected to increase returns to production of tradable agricultural produces. This in turn supposed to create conducive environment for accelerated growth of the agricultural sector.

However, the high transaction costs due to poor state of the rural roads and other physical infrastructure, asymmetry in market information, high rural illiteracy rate, lack of skill and local organisations such as marketing coops have continued to limit the smallholders' access to the market. Uncertainty and high transaction costs are barriers to technical change and to invest in new crop technologies aggressively and desperately promoted by the MoA profitably. The rates of technical change and production growth are not only the function of available technologies, but also of

market incentives (Boughton et. al, 1995, cited in Jayne, 1998). Devaluation of the national currency, the Birr (8.7 birr = $ 1 U.S. dollar), in 1993, the removal of input subsidies and pan-territorial pricing in 1996, high interest rates after liberalisation of the financial market have made the use of land productivity enhancing inputs economically less attractive and beyond the reach of the majority of smallholder farmers in the post SAPs. The empirical evidence provided by the International Food Policy Research Institute (IFPRI) (Gebre Medine, 2003 cited in Addis Tribune news web page) supports the argument.

> *"As the ratio of input prices to maize prices increased from 1.7 in 2000 to 9.0 in 2002, maize production became highly unprofitable business that farmers abandoned their crop in the field and reduced their fertiliser use by up to 20%. This accompanied with poor weather, will likely result in a drop in maize production by 52% and in an overall cereal production by up to 15% in 2003." Gebre Medine, 2003 as cited in Addis Tribune news web page.*

Moreover, the premature retrenchment of the AMC in the circumstances where transaction costs are high and private traders are yet to develop to takeover the role of the parastatals could also lead to more market uncertainty, widely fluctuating producer prices and high input prices. This would, in turn, discourage sustainable intensification. For instance, in some African countries such as Tanzania, dismantling of the parastatals after the SAPs led to some retrenchment from farmers part towards crop requiring few purchase inputs and offering either quick or stable, but a low return (Bryceson, 2000). The World Bank itself admitted that the expected levels of competition and private traders participation in agricultural marketing has not been realised in Ethiopia due to constraints related to access to capital, inadequate market infrastructure and high transaction costs (World Bank, 1999, cited in Devereux, 2000).

The overall implication of the review in this section is that intervention by government in improving market infrastructure and encouraging institutional innovation to reduce uncertainty and transaction costs of exchange is required. Such intervention is needed to integrate the semi-subsistence and semi-open Ethiopia's rural economy to the mainstream national and global economy. This, in turn, will accelerate

commercialisation of smallholder production, sustainable intensification and rural livelihoods diversification.

3.5 ACCESS TO APPROPRIATE TECHNOLOGIES

The modern agricultural research and extension systems were first conceived in England by the establishment of Edinburgh Laboratory in 1842 and Rothamsted Experimental Station in 1843 (Ruttan and Binswanger, 1978). They were introduced to SSA between 1930 and 1959 (Eicher, 1989). Agricultural research and extension began in Ethiopia relatively late. The history of agricultural research in Ethiopia began in 1952 with the establishment of the then Alemaya College of Agriculture (now Alemaya University) based on the US land grant college model. Alemaya had handed over its national research and extension mandates to the MOA and the Institute of Agricultural Research (the current Ethiopian Agricultural Research Organisation or EARO) in 1963 and 1965 respectively. By 1974, there were only 124 agricultural extension agents and 72 specialist agents in coffee production in Ethiopia (ECA/FAO, 1981 cited in Tefera, 1995). At approximately the same time, Kenya, a country with population of a half of Ethiopia, already had 5,277 extension agents on payroll (Schulz, 1983).

It can be argued that it is not more than a decade since smallholder farmers in Ethiopia began to experiment with modern agricultural technologies on a significant scale. In the 1950s and 1960s, agricultural sector as a whole was neglected by policymakers of the country due to the 'industry first' argument of the period. The Ethiopian Imperial Government's policy document, for example, indicated that there was no need to change the traditional peasant methods of production (Mengisteab, 1990). It was only in the Third Five Year Development Plan (1968-1973) that agricultural development got a cursory attention due to increased realisation of continued stagnation of the sector, the growing dissatisfaction and restlessness of the rural population and pressure from the donor community (Mengisteab, 1990). Yet, few tenants had benefited from the rural development programs and projects initiated by the SIDA and the World Bank in the Central Highlands of Ethiopia and south of the country. This was due to the insecure and exploitative feudal land tenure system and limited area coverage of the projects.

In the post-revolution period (1975 - 1990), the main objective of agricultural development became the development of large-scale mechanised socialist agriculture through establishment of state farms and promotion of producers' co-operatives. The most dominant smallholder sub-sector was excluded by the policy. Agricultural extension personnel, agricultural inputs and input loans were systematically directed to the socialist sectors. For instance, 85% of agricultural credit, 50% of fertilisers and 79% of improved seeds was allocated to state farms and producers' co-operatives that jointly accounted for only 5% of the total cultivated land and 4% of the total national crop production (Belete, 1992).

Moreover, an ILO Mission to Ethiopia in the early 1980s observed that Ethiopia "*has systematically under-invested over along period in rural infrastructure – roads, power, irrigation, storage and processing facilities – and in health, education and training of its rural population*" (ILO/JASPA, 1981, quoted in Livingstone, 1990:296). Military expenditure that had reached 37% of the country's GNP by 1991(Tekabe, 1998, cited in Devereux, 2000) is also believed to have diverted scarce resource from rural and agricultural development programs.

Unlike the two previous regimes, the development of smallholder farms is at the centre of the Agricultural Development Led Industrialization (ADLI) in the development strategy of the ruling party (EPRDF). The aggressive agricultural extension program launched in 1994 by the same government has enormously improved peasant farmers' access to productivity-enhancing crop technologies, extension advice and input loans. The total cultivated area on which inorganic fertilisers were applied increased from 1,845,000ha in 1990/91 to 2,764,000ha in 1997/98. The total volume of inorganic fertilisers applied increased from slightly over 1 million *quintals* in 1990/91 to an annual average level of over 2.5 million *quintals* (one quintal = 100kg) from 1995/96 to 1997/98. The number of personnel in extension and veterinary services has also increased significantly (CSA, 1998, cited in Seyoum, 2000). The government again committed itself to invest up to 1.5% of GDP in agricultural research (government web page).

There are, however, still challenges ahead to make the NARS and extension system of the country responsive and efficient to bring about concrete and sustainable

impact on production and productivity and to ensure sustainable NRM. Ethiopia's NARS has a shortage of highly trained and experienced researchers since its inception, yet it is one of the SSA NARS known for their inability to retain senior staff (Eicher, 1989) due to low pay and unattractive working environment. Ethiopia's NARS has also experienced frequent restructuring and change of mandates that might result in loss of 'institutional memory'. The latter has serious negative repercussions from innovation point of view since concerted and sustained effort is required to produce the desirable results. The overall result is that agricultural research in the country is still rudimentary, and profitable production and conservation technologies are largely unavailable (Shiferaw and Holden, 2000).

Equally important is the fact that farmers in Ethiopia have never been given opportunities to influence the research and extension agenda. Research topics are determined more by the interest of the researchers than what ought to be searched (Goshu, 1995). Unless the poor farmers have power to participate in deciding technological choice, they are unlikely to benefit (IFAD, 2001). The fact that the level of dissemination and the adoption rate of existing productivity-enhancing crop technologies are disappointingly low and the agriculture sector fails to feed the increasing mouths and to fulfil its other basic functions are partially the reflection of the NARS' and the extension system's Achilles' heel.

On the credit side, promising efforts are underway to reverse the prevailing an unacceptable situation of the NARS for better. The World Bank had approved a loan amounting to 60 million U.S dollars to strengthen agricultural research and training of the country, and to create an enabling environment for smallholder farmers to influence research agenda at the local research centres (Addis Tribune News, June 6, 1998). This is a move towards the right direction. The policymakers and the concerned scientists have now a challenge ahead and a bright future as well in their move forward!

3.6 SUMMARY AND CONCLUSION

The interaction between rural population, natural resource and human welfare does not take place in an institution free environment. It is the prevailing society-specific broader institutional arrangements and policy environment that mediate the interaction between population growth and rural development and influence welfare and sustainability outcomes of rural livelihood behaviour.

This chapter has attempted to present a critical review of the evolution and salient features of the institutional and policy settings in Ethiopia in a historical perspective. The review has been conducted with the aim of understanding the degree to which an enabling environment has been created for the realisation of sustainable rural livelihoods in the context of rapidly changing man-land ratio. The chapter attempted to critically look into the land tenure institution, organisational and institutional factors in NRM, smallholder farmers' access to the market and appropriate technologies and the overall agricultural policy environment in the country.

In general, the review revealed that smallholder farmers in Ethiopia have never been granted land tenure security and have never been given the opportunities to use and manage the common property regime collectively at the grassroots level. Participation by the farmers in the input and output markets has been constrained by the high transaction costs due to poor infrastructure, information asymmetry, illiteracy and inability of smallholder farmers to influence the terms of market participation. On the policy front, it became evident from the review of the available evidence that smallholder sub-sector in this country has been neglected, purposely discriminated against and exploited by all account. Until recently, no genuine effort has been made by policymakers of the country to improve smallholder farmers' access to appropriate technology and to create price incentive through the adoption of agricultural policy that makes farming profitable. All of these factors have seriously limited the motivation and capacity of the smallholder farm households to respond to the unprecedented demographic pressure in an environmentally sound manner. We shall see this in detail in the subsequent chapters.