

SETTLING SEMI-NOMADIC PASTORALISTS IN THE AWASH VALLEY

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ABSTRACT. The nomadic areas of Ethiopia cover nearly two thirds of the country's land area and provide livelihood to 10 per cent of the population. The traditional production systems in the areas dominated by pastoralism are increasingly failing to support the subsistence needs of the people due to ecological changes, expansion of irrigated agriculture, opening up of national parks and over stocking on the remaining lands. These developments have led to the creation of destitute groups of nomads without a means of subsistence. There are rural development programmes introduced to transform the way of life of particularly of pastoralist nomads. Among these programmes the most radical is the settlement programme. Settlement programmes are introduced to promote the welfare of the nomads, to utilize water and land resources efficiently and to promote political stability in the areas. This paper is a review of the experience of nomadic pastoralists in the Awash Valley which is the most developed farms among the nomadic regions. It shows that the settlement farms in the area have failed to achieve their objective of transforming the nomads into sedentary cash crop producing farmers. The problems encountered on the farms are discussed in order to draw lessons for the future settlement farms that are to be established in the nomadic areas.

1. INTRODUCTION

The nomadic areas of Ethiopia cover 767,000 square kilometers or 61 per cent of the total land area of the country (See Fig. 1). These areas get on the average 700 mm rainfall yearly and are classified as arid and semi-arid lowland regions lying mostly below 1700 meters above sea level.¹ A recent study [31] estimated that in 1982 there were 3 million nomads in the country of which 2.4 million are pastoralists (See Table 1 for details).

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TABLE 1
Population Numbers of Pastoral People
in Ethiopia by Ethnic Group - 1982

Ethnic Group	Population Numbers
Geleb and others in Hamer Bako	188,600
Tigre	296,700
Gumuz	94,925
Somali	1,303,780
Gambella groups (Annuak, Nuer)	103,200
Borena	165,600
Afar	221,300
Beni Amer	80,000
Saho	48,000
Total	2,442,105

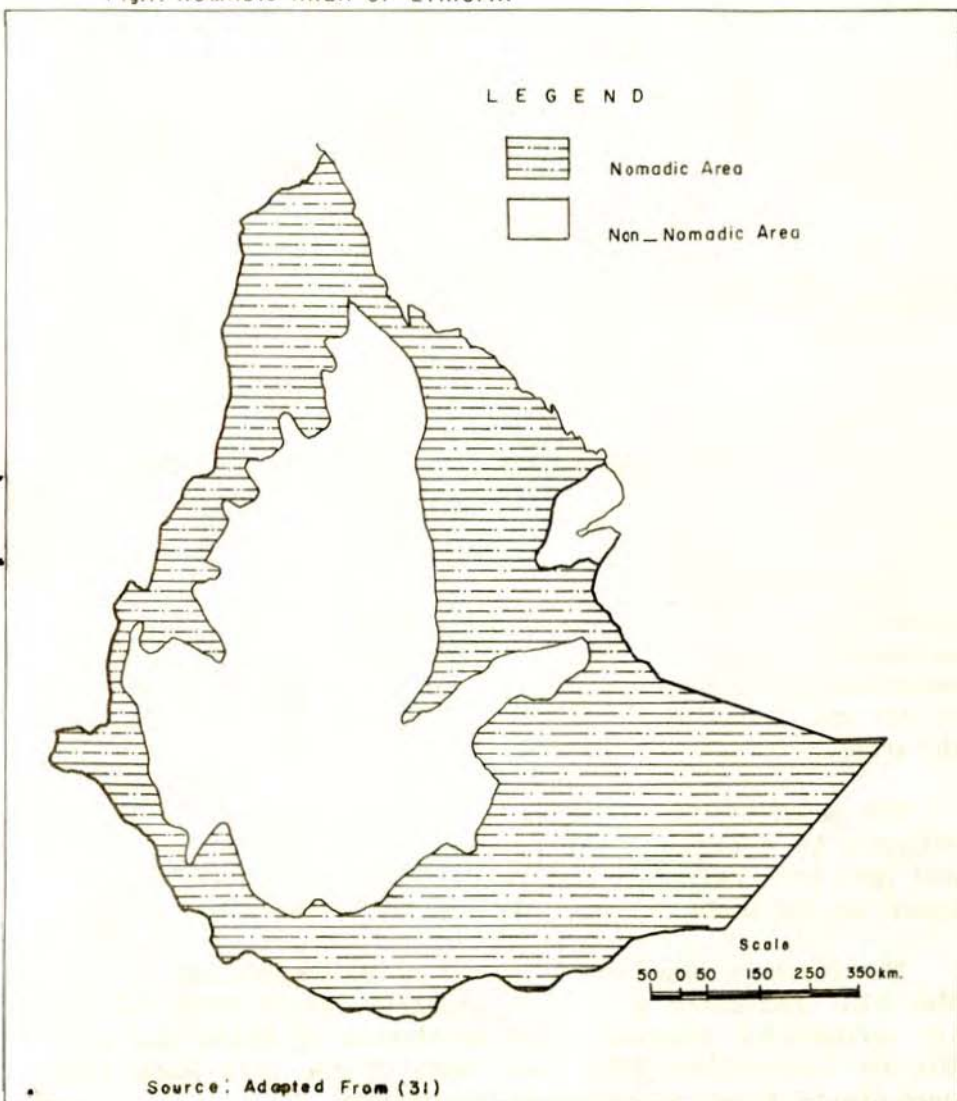
Source: [31, Part III, p. 6].

The areas account for 20-30 per cent of the livestock population of the country. Livestocks are kept as a source of subsistence consumption and as indicators of wealth which has resulted in overstocking and over-grazing of the areas.

The areas have a potential for expansion of irrigated agriculture. Most of the uncultivated irrigable land of the country is found in these areas. It is only the Awash Valley nomadic area that has been subjected to extensive agricultural development. Recently there are plans drawn to extend irrigated agriculture in all of the river valleys found in the nomadic areas.

A major ecological change is taking place in the areas exacerbating the aridity of the areas. The recent drought in the country has resulted in the destitution of a sizable proportion of the nomadic people who were left without livestock or any other means of subsistence.

Fig.1. NOMADIC AREA OF ETHIOPIA



The national game parks in the lowlands are found in the nomadic areas. For instance the Awash Game Park and the Omo National Park are situated in the nomadic areas. These parks have led to the contraction of grazing lands.

The traditional production systems in these areas are increasingly failing to support the subsistence needs of the nomadic people. The major reasons for this are the ecological changes, decreasing of grazing land areas (as a result of expansion of irrigated agriculture and opening up of the national game parks) and the practice of over-stocking. In response to these developments and in the interest of promoting efficient utilization of resources the government has introduced several rural development programmes in these areas. The programmes are expected to improve political stability by integrating the economic activity of the people into the national economy. The programmes include range land development projects, other livestock improvement programmes, and settlement programmes. Of these the most prominent is the settlement programme.

This paper reviews the experience of settling nomads in the Awash Valley. The Awash Valley settlement schemes are reviewed because it is here that one gets settlement farms that have existed for relatively long period of time and the experience of settlement in this area is believed to be of importance to the rest of the nomadic areas.

The paper starts with a brief description of the Awash Valley followed by a review of the settlement schemes in the pre 1974 and post-1974 periods respectively. Finally a conclusion is drawn based on the problems and achievements of the settlement farms.

The paper is based on a review of documents and reports of the RRC and other government agencies which were responsible for settlement. Interviews with employees of Relief and Rehabilitation Commission (RRC) and visits to the area since 1982/83 have also been used as sources of information.

2. A BRIEF DESCRIPTION OF PRODUCTION SYSTEMS AND PEOPLE IN THE AWASH VALLEY²

The Awash Valley has been the most extensively developed river valley in Ethiopia. Most of the large scale private farms were located in this area. Until recently, the hydroelectric generating dams in the country were found only in this valley. The area has been supplying most of the cotton and all of the sugar consumed in the country. The role of the areas in the monetized economy of the country has been substantial. In addition to this there had been a sizeable supply of livestock and livestock products from the area.

The valley could be divided into four ecological and development regions: upper basin, upper valley, middle valley and lower valley. The upper basin extends from the origins of the Awash river to Koka Dam and is relatively densely populated highland agricultural area (more than 2000 meters above sea level and with substantial rainfall). The upper valley covers the area from Koka Dam to Metahara area. This sub-region is marked by the modern large scale sugarcane plantations. The middle valley lies between Metahara and Tendaho. This area as well is subjected to intensive modern plantation agricultural development. In the lower plains extending from Tendaho to the Ethio-Djibouti border, there had been considerable independent agricultural development in the pre-land reform period. It is still an important state farm and settlement agriculture area.

Most of the land in the valley except in parts of the upper basin had been traditional grazing land of nomadic and semi-nomadic pastoralist tribes, the Afar, Arsi, Ittu, Jille and Kereyu. All of the pastoralists used the land for grazing of livestock. The plains away from the Awash river were used as wet season grazing lands when the river banks become inhabitable, forming swamps. The area adjacent to the Awash river has been used as dry season grazing land (the pasture remaining behind on the dried up swamps served for feed and the river for water).

3. THE FIRST SETTLEMENT FARMS IN THE AWASH VALLEY

Starting in the late 1950's the Awash Valley has been subjected to large scale agricultural development. This irrigate agricultural development had affected the pastoralists who were living in touch with the Awash river. The interests of the pastoralists and the large scale farm developers centered around the same pieces of land. The investors were interested in lands that could easily be irrigated and fertile as well. These land were the lands that were used as the dry season grazing lands by the pastoralists [See 14, 15, 20 and 28].

The question of land ownership had been a point of dispute between the central government and the pastoralists in the pre-1974 period. The legal status of nomadic lands had been established as being government land or state domain. The history of land holding rights in the valley since the beginning of the century had been a point of disputes between the government and the pastoralists were engaged in agriculture. The experience of the Afar in the lower plains had been a case in point, even though the people in the area had been cultivating the land for generations they did not have a legal land holding right [3, 14, 20 and 21].³

The development in the valley had been accelerating in the 1960's when the Awash Valley Authority (AVA) was established. The first provision of the charter to establish the AVA states that its establishment was to use the natural resources of the area to the maximum [17]. Even though the expansion of private large scale farms in the area had started long before the AVA was established most of the farm expansion occurred under it. An important development regarding the expansion of private farms after the setting up of the AVA is the involvement of the Afar chiefs in an independent commercial agricultural development. The rapid growth of commercial agriculture in the area covered almost 50 thousand hectares (one fourth of irrigable land in the area) within a period of ten years up to the early 1970s [41]. At almost the same time about 80 thousand hectares of land were taken over to form the Awash Game Park. The pastoralists had been opposing

the taking over of land for non-grazing purposes through various means [7, 20 and 32].⁴

The relationship the AVA had with the pastoralists, apart from the land disputes, was the token settlement programme which started in 1966. The opening up of these settlement farms could be regarded as a measure to appease the pastoralists in the area who were opposing the agricultural expansion. The first settlement farm, Dubti started operation on a 95 hectares of land allocated by the AVA. The total number of settlers had been only 19. This number of settlers had been maintained up to 1974. The second settlement farm had been Amibara which started its operation in 1967. The farm expanded to cover a total land area of 535 hectares by 1973 and the number of settlers increased from 56 to 214 [See 2 and 27].

These two settlement schemes were not composed of marginalized pastoralists (without the bare minimum support from the pastoralist way of life). The settled families had a herd of cattle and sufficient means of covering their subsistence needs when they were settled. The selection mechanisms adopted by the AVA ensured that those selected were from families of chiefs or families associated with them [27].

The would-be settlers were given training for a year, and the AVA selected those who could settle from among those who received the training. The settlement farms were expected to operate on 'outgrower' scheme basis (growing cotton on their farms and sell it to the adjacent large scale farms). As a result of high international cotton prices the settlers had obtained quite substantial incomes [20]. The high income received by the settled families had attracted the nomads who started to apply to be settled in increasing numbers [14]. In this period the pastoralists were maintaining their herds of cattle on the side and there were problems of insufficient commitment to farm. It was not unusual to see the settled nomads employing farm hands.

4. SETTLEMENT FARMS IN THE POST-1974 PERIOD

The settlement farms in this period could be described using the major characteristics of the farms:

- i. There was no clear policy on how to settle pastoralists and the farms were established in haste.
- ii. The farms are mechanized cotton producing farms run by RRC appointed managers.
- iii. The farms are facing the difficulty of settling pastoralist people on crop farms.
- iv. There is limited participation of settlers in farm work, as a result workers are employed to work on the farms.
- v. The farms are loss making farms run with government subsidies.

4.1 Opening Up of the Settlement Farms

One of the provisions of the proclamation to nationalize rural lands [25] states that the government would take the responsibility to improve grazing lands, to dig wells in nomadic areas and to settle nomadic people. The taking over of private farms and converting them into state farms and partly settlement farms to settle pastoralists in the Awash Valley had been important measures that affected the lives of the people in the area. The expansion of settlement programmes had been the direct result of the political developments in 1974 and 1975. The reasons for opening settlement farms in this period were [27]:

- to continue production in the nationalized commercial farms which were not converted into state farms.
- to maintain the workers in these farms in employment and,
- to accommodate marginalized pastoralists.

A major settlement programme was launched in the lower Awash area on the nationalized farms of Afar chiefs. In addition to these farms an additional 500 hectares of land were taken from the Tendaho Plantation to enable the distribution of 2.5 hectares of land per settled family.⁵ The major settlement areas were Gewane, Amibara, dubti (Beyahle and Detbahri) and Assayta (comprising eleven settlement farms) [27]. The nationalization of the farms ensured that the settlement farms started operations with substantial amount of capital.

The settlement farms expansion remained relatively stable for a long period both in terms of land area and number of settlers as shown below in Table 2.

Table 2
Settlement Farms Area and Number of
Settlers by Place and Year

Year	Area*	Total	Settler Number				
			Amibara	Gewane	Dubti	Assayta	Others
1976	13	3650	441	384	440	2399	-
1977	13	4544	441	384	1320	2455	-
1978	13	4598	441	384	1320	2455	-
1979	13	4273	441	384	1422	2026	-
1980	13	5031	441	384	1423	2783	-
1981	10	4827	441	384	1423	2579	-
1982	10	5160	441	384	1423	2912	-
1983	na**	6893	441	384	1423	2874	1771

*Area in thousands of hectares.

**na = not available

Source: [27 and 29].

4.2 Nature of the Farms

The responsibility of settling the nomads on the nationalized farms was given to the AVA under the supervision of the Ministry of Agriculture. Soon the RRC became the agency responsible for

settlement and resettlement in the country. The policy of government agencies responsible for settlement in the area had been to settle the pastoralists on mechanized cotton farms supplemented with maize production and animal husbandry [See Table 3].⁶ As the Table shows, cotton production took about 60 percent of the total land of the farms.

TABLE 3
Land Use in the Settlement Farms
In the Awash Valley-1982 (in hectares)

Activity	Amibara	Gewane	Dubti	Assayta	Total	%
<u>Agri.</u>						
Cotton	1215	400	5800	4600	8015	62.6
Maize	-	-	645	1600	2245	17.54
Pasture	170	-	600	1600	2380	18.6
Others	126	1.5	30		160.5	

Source: [27].

The government allocates money for running of the farms based on a yearly budget. The farm managers use the money to purchase capital goods, other material inputs and labour power. The settlement farms get subsidized services (land grading leveling, etc.) from state farms in the area. The output, particularly cotton is sold to state purchasing agencies at a fixed price. The settlers have extremely limited participation in farm management.

4.3 Transforming a Way of Life

Settlement schemes involve a major change in the way of life of the pastoralist people.⁷ The demands of this change have been a major problem to the settlers and the settling agencies in the Awash settlement schemes.

The difficulty of retaining the settled people in the settlement schemes has been a major problem to the settling agencies. The resistance of settled pastoralists not to loose contact with their

herd had resulted in conflicts between the settlers and RRC officials running the settlement farms [20 and 27]. This has to do with the problem of not being able to have the settlers full time on the farms.

4.4 Limited Participation of Settlers in Farm Work

In the absence of farming skills by the nomadic people who were not given proper training the demand for farm hands has been met by employing wage labour [27].⁸ As Table 4 shows, there had been on the average nearly one farm hand employed for every settler in 1982. The understanding had been that settlers would pick-up farming knowledge while working side by side with the farm labourers. On hind sight it is easy to see that this would result in problems. At the very least, the settler wage worker relationship had made it difficult for the RRC to manage the settlement schemes. As a result of the involvement of wage workers one could view the farms as a special type of state farms where:

- i) as farms the settlement farms could be regarded as production units while,
- ii) the stipend paid to settlers irrespective of the financial position of the farms make them a welfare programme.⁹

TABLE 4
Farm Labourers and Settler Numbers
in the Awash Settlement Farms - 1982

Farm	Labourers (1)	Settlers (2)	Ratio of work- ers to settlers	
			(3)	(1) (2)
Amibara	1800	441	4.08	
Gewane	632	384	1.65	
Dubti	795	1423	0.56	
Asayta	2312	2912	0.79	
Total	5539	5160	1.07	

Source: RRC

4.5 Financial Position of the Farms

The farms are loss making and hence need huge government subsidy. The high production costs and the low cotton prices¹⁰ are the major contributing factors for the loss making (See Table 5 below).¹¹

Table A and B (in the appendix) show the financial position of the farms over a five year period from 1978 to 1982. The financial position of the farms, except that of Gewane, has been far from healthy. The total expenditure on the farms had been Birrs 144 million while the total revenue had only been Birrs 64 million over the five years period. Table 5 demonstrates the revenue, cost, and profit and loss position of the farms in terms of per settled family. As the Table shows there are marked differences in investment levels, operating costs, wages paid and total average revenue. The total average cost of settling per family per year is about Birrs Thirty thousand. The total loss made by the farms in terms of per settler is Birrs 6677.89. However, the loss made by the farms without including the stipends paid to the settlers would be Birrs 2623.38 per settled family in these five years (See Fig. 2). Even this latter figure is quite high given the economic condition of the country.

In view of the experience in the settlement farms in the past decade, the RRC:

- i. has started to reduce its emphasis on promoting cotton production [27]; and
- ii. has handed over the main cotton producing farms to the Ministry of state farms in order to decrease the loss of the farms.¹²

There seems to be a need for taking a special care not to endanger the future of settlement in the area as a result of these moves. The fact that settlement farms are making losses might not be a good criterion to judge whether the farms are successful or not. Given the characteristics given above it is not an appropriate criterion.

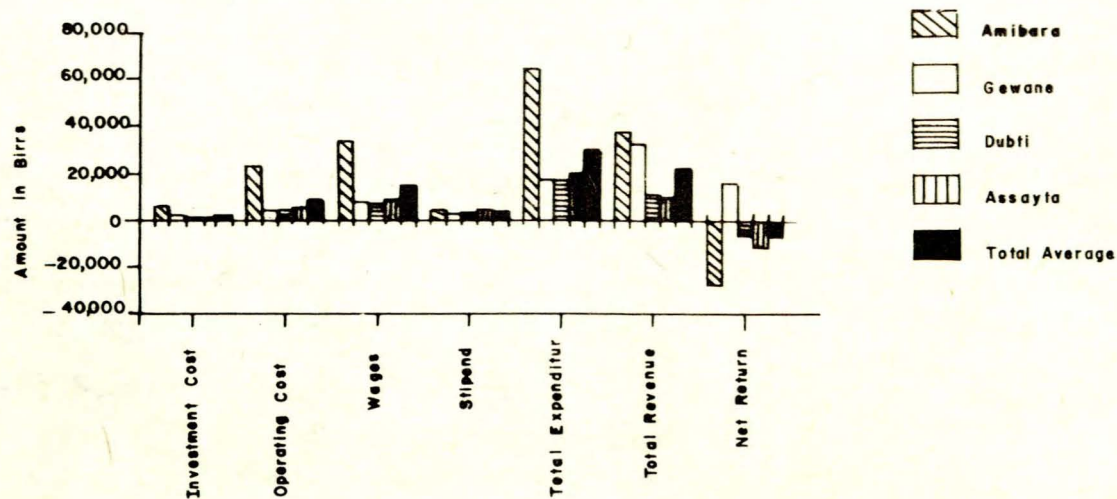
TABLE 5

Revenue and Expenditure Per Settler Family in the
Awash Settlement Farms (1978-1982)

Farm	Expenditure		Wages	Stipend	Total	Total	Net
	Investment	operating cost			Expenditure/ Settler	Revenue / Settler	Return
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)-(5)
Amibara	5564.28	23667.53	33997.43	4718.23	64947.47	38416.02	-26531.45
Gewane	1693.73	4375.95	8291.15	2963.56	17324.39	33316.32	15991.93
Dubti	1278.99	4842.48	7951.12	3793.44	17866.03	12325.38	- 5540.65
Assayta	921.49	5541.80	9952.59	4742.82	21158.70	10527.28	-10631.42
Total Average	2364.62	9606.94	15048.07	4054.51	30329.15	23646.25	- 6677.89

Source: RRC.

Fig. 2. REVENUE AND EXPENDITURE PER FAMILY
IN AWASH RESETTLEMENT FARMS (1978-1982)



5. CONCLUSION

The age old way of life of the pastoralists is on the way out in the Awash Valley as in other areas of Africa. This fast change in the harsh and difficult life that the nomadic and semi nomadic people lead is a result of both endogenous and exogenous factors.¹³ The demands of development have put a strain on the already fragile system of subsistence production. The pastoralists may be in a position to accept settlement now more readily than ever [2].

It seems that the pastoral people are caught in a situation where forces outside their control are pulling them towards the settlement farms while the experience in the farms is not. Unless there is a comprehensive plan drawn for the whole area, it seems that this paradoxical situation may negatively affect the pastoralists to the detriment of the overall national interests of promoting the welfare of the whole population.

The practice of determining success or failure of settlement farms on the basis of profit and loss accounting as isolated financial units may not be the best method of evaluating the performance of the farms as economic units. There is a need for going beyond financial analysis and conduct economic analysis. For instance an economic appraisal of state farms in the same area, shows that the loss making state farms are feasible and showing benefits in economic terms [12]. If one is to conduct a social cost benefit analysis the settlement farms might yield the same results.

Conducting of a social cost benefit analysis for every project may change the results of project feasibility studies. This is because of the necessity of costing all the inputs and considering the economic benefits of projects on the basis of social weights. For instance, it is common that the shadow price of land for agriculture is usually considered as zero and externalities are rarely considered.¹⁴ As a result of development projects, not only land is taken over but other factors may be changed as well, such as levels of pollution of water, cattle feed, air, etc. which affect the people inside as well as outside these farm areas.¹⁵

Modern development may have to be supported on the grounds of efficient utilization of resources. However a major concern in increasing the efficient utilization of resources is the increase in the welfare of the society as a whole, be it in setting up of settlement farms, expansion of state farms or construction of dams.

In addition to these considerations the food security situation in the settlement farms has to be ensured if the policy of settlement on cotton farms is to continue on. Food self-sufficiency is one of the major felt needs of the nomadic people [2].

The settlement farms have to be further studied. In-depth studies in varied social science fields are necessary. The changing situation existing on the farms presently may not be captured unless researches are undertaken at least in the near future.

NOTES

1. Daniel Gamachu's [9] 'peripheral areas' are mostly found in the nomadic areas. The peripheral areas had been defined on the basis of low moisture and low potential for rain-fed agriculture.
2. This part relies on [14, 18, and 29].
3. A recent study indicates that the Afar are still concerned with land holding rights [2].
4. Even the data on crop damage in state farms due to cattle could be indicate of this fact. Table 6 in the appendix indicates that in the drought years this cattle damage is on the increase.
5. The 2.5 hectares were partly the average land area per settler family within the undivided large scale farm (total land area of the large scale farm divided by the number of settled families).

6. This is in line with other transformation approaches in Africa see [15].
7. For a detailed discussion of the pastoralist way of life in Africa refer to [10, 15, 19, 22, 24]. The Ethiopian pastoral peoples way of life is reviewed in [31] and that of Awash Valley pastoralists and particularly the Afar is treated in [7, 20 and 32].
8. One may add to this the objective of giving employment to the workers who were employed in the nationalized commercial farms.
9. The workers view the settlers as rentiers even when the settlers are participating in the farm activities because of the limited farm works they engage in.
10. Cotton prices were kept low for more than ten years and grew marginally recently. This low cotton price has left state farms producing cotton at consistent loss making position over the years [13].
11. For details see Tables A and B in the Appendix.
12. The settlers were shifted to the adjacent settlement farms.
13. Refer to works mentioned in Note number 7 above.
14. For instance, the lack of shadow price for land rent in the Ethiopian Project Agencies proposed national parameters in project evaluation [10] seems to be a serious omission as far as agricultural projects are concerned. In the nomadic areas, the opportunity cost of land can be evaluated on the basis of what the land could have been used if not for farm.
15. An extensive study in the Awash Valley indicated that the expansion of commercial agriculture has led to expansion of schistosomiasis [see 18 and 20].

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APPENDIX

TABLE A

Total Revenue of Settlement Farms in the Awash Valley
Settlement Farms by Farm From 1978 to 1982 in Birrs

Year	F a r m s				Total
	Gewane	Amibara	Dubti	Assayta	
1978	-	244106.17	-	-	244106.17
1979	445151.54	2317614.17	2537219.29	4001647.41	9301632.61
1980	7479363.11	3009632.11	4216113.03	6227116.12	14740224.37
1981	1057637.14	5356374.36	8689235.31	20470490.31	2470490.68
1982	811314.00	5186854.19	5429312.10	7937101.22	19364581.66
Total Average	12793465.94	16941463.51	17539018.78	19364581.66	64129037.49

Source: [26].

TABLE B
Total Cost of Running the Settlement Farms in the
Awash Valley From 1978 to 1982 in Birrs

Farm	1 Investment	2 Operating Costs	3 Wages	4 Stipend	5=1+2+3+4 Total	6=5+4 Total
Gewane	650392.16	1680365.01	3183801.93	1138005.76	5514559.10	6652564.86
Amibara	24531847.67	10437382.01	14992866.09	2080738.48	49962095.70	52042834.25
Dubti	1820003.63	6890845.24	11314439.83	11314439.83	20025288.70	31339728.53
Assayta	2350716.37	14137123.29	25389060.00	12098942.42	1876899.66	53975842.08
Total	29352959.83	33145715.55	54880167.85	26632126.49	117378843.23	144010969.72

Source: [26].

TABLE C

Cattle Damage on Seed Cotton Yield in Awash Valley
State Farms - By Farm and Year (in Quintals)

Farm	1980	1981	1982	1983	1984	1985
Dubti	1017	4050	324	11525	1670	-
Ditbahri	413	-	-	24516	2048	-
Asayita	-	-	-	-	-	-
Senbeleta	-	-	-	-	1000	-
Mille	-	-	-	-	-	-
Melka Sedi	-	-	-	2280	1500	-
Amibara	-	-	-	4433	841	-
Melka Werer	-	-	-	12577	-	-
DofanBolhamo	-	-	-	-	2002	-
Gewane	-	-	-	7005	-	-
Nura Era	-	-	480	120	-	-
Aware Melka	-	-	-	4692	-	-
Total	1430	4050	804	67152	9061	-

Source: [1 and 23].