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**Resource Mobilization in Addis Ababa University:
Income-generating Activity at the Awassa College of
Agriculture and Debre-Zeit Junior College of Agriculture**

**Dr. Johannes Kinfu
Dean, Faculty of Management and Economics**

- I. Revenue generating activities are activities that are undertaken for the purpose of raising income. However, it must be noted whether this is the only purpose or there are also other conjunctive objectives with it inter-alia, for example, educational objectives such as imparting of practical experience or provision of ancillary services as well.

When an activity is stated to be income-generating it must be explicitly resolved whether the income expected is to be eventually self-financing, that is covering cost fully, and or generating surplus above cost and thus support declining government budgetary appropriations. If an activity does not cover cost or manage to finance itself, then the extent of expecting continuing of the activity with subsidy must be realized in advance.

The economic crisis of 80s in African countries have brought extreme hardship on social expenditure, and severe financial constraints on education. As a result of worsening economic condition the educational sector finds its financial allocation from the government reduced which in turn leads to deteriorating infrastructure, declining educational inputs, resulting in a poor quality of education. The obvious impact of this on the quality of manpower produced, the teaching profession and research is not necessary to delve into here. The consequence is that the role that universities are expected to play in economic development is seriously hampered.

In the middle of this there have been increasing arguments that the rate of return (social return) on higher education is low, making government's sustained support for higher education very doubtful. Higher education institutions thus have to look for financial support outside the government. Several strategies have been suggested to meet for this problem among which are "policies of decreasing unit cost, constraining output (limiting enrollement), and expanding cost-sharing by beneficiaries". One scheme seems to be most important in mitigating effects of financial crisis while enhancing other important educational objectives, thus serving double purpose. This is the measure of seeking for additional sources of revenue by resorting to revenue generating activities within the higher education institutions themselves. Revenue-raising measure should be thus explored as a way of generating badly needed resources.

Revenue generating activities such as extension educational programmes, university farms, contract researches, or consultancy services have been desirable activities to conduct in order to obtain financial return to a university, although the primary objective of them may not only be revenue. These activities are not run only for pursuit of financial

objectives, but also for educational values. Can pursuit of educational values in these operations preclude the possibility of financial pursuit or vice-versa?

Without indulging too much into the pro and con arguments, or the compatibility of the incompatibility of these objectives, let us say that so long as there is opportunity and the need for it exists the pursuit of educational values in these operations need not preclude the possibility of financial pursuit. It may not be easy, but it is necessary that universities engage in this endeavour that augment their resources without sacrificing their educational values.

Among the activities that have both aims are, for example agricultural production activities in agricultural education institutions, the specific uses of which we will be examining in the Awassa Agricultural College Research and Far, Center (RFG), and Debre-Zeit Junior Agricultural college Poultry Far, Project, all of which are part of the Addis Ababa University (AAU).

II. Awassa Junior College of Agriculture (AJCA)

Historical Background of AJCA

The Awassa Junior college of Agriculture (AJCA) was found in 1976. Since its establishment the college has been under direct supervision/administration of the Addis Ababa University. The site of the college which was previously (before the 1974 revolution) used to train community development workers is located in Awassa town, Sidamo administrative region some 275 kilometres south of Addis Ababa. Considering the long standing agricultural development desire of the country this place is believed to be as one of the best possible location in the southern region representing the major agricultural zone.

The main campus occupies 221/2 hectares size of land, which was found to be too small to accommodate the rapidly increasing teaching, research, extension and production activities of the college. Latter acquisition of 468.6 hectares of land by the college at about three kilometres distance from the main campus, and establishment of other four research substations at different ecological zones (Moyale, Mega, Dodola and Zewai) were justified to overcome the problem.

Change Indicators:

The college has shown tremendous growth since its founding 1976. Some of the tangible evidences of change made by the college during its 15 years period of existence include:

1. rise in regular programme enrolment from 257 in 1976/77 academic year to 680 in 1990/91.
2. increase in the number of fields of study and level of specialization i.e. from 5 diploma programmes in 1976 to 5 diploma and 2 degrees programmes in 1990/91.
3. expansion of training programmes from one regular programme to three with the opening of evening and Kiremt In-service.
4. rise in the number and qualification profile of teaching staff. Staff number has increase from 7 in 1977/78 to 90 (including staff on study leave) in 1990/91 academic year.
5. increase in number of research and research participants from only one in 1979/80 up to more than twenty in recent years.
6. production of various crops to supplement the limited annual government budget of the college.

Objectives

As stated in various documents (including one prepared in Feb. 1988 for curriculum proposal) the overall objective of AJCA's establishment are:

- a. to train skilled technicians capable of performing tasks in agricultural occupations.
- b. to contribute through research and extension, to the agricultural development of southern region of Ethiopia and the country at large.
- c. to act as one of the core or embryo institutions for the future establishment of southern university.

Another document written by AJCA in August 1988 put the objectives of the college in very specific terms as:

1. Education training
2. Research
3. Extension
4. Production

At the inception of this college it was generally felt that the middle level agricultural training in the country (provided at Jimma, Ambo etc.) was deficient in that:

- graduates were inadequately prepared to handle the task or rural development,
- the trainees received a heavy dose of theoretical knowledge without sufficient practical and field experiences,
- the systems of agricultural training that prevailed was failing to inculcate the proper attitude and work habits essential for rural development.

In view of the above drawbacks a new strategy which leads to more emphasis in practical training of manpower, and a high degree of technical and practical know-how along with a modest theoretical background, was believed to be most needed.

The distinguishing feature of Awassa JCA was therefore its production oriented programme to provide students a high degree of manual skills by "effective learning" through doing. Hence this practice and production oriented program was expected to meet the following specific objectives:

- a. make agricultural training relevant to the economic development of the country,
- b. assist institutions on organizing and offering refresher courses for persons engaged in agriculture and rural development,
- c. create a rural nucleus for agricultural technologies to rural Ethiopia,
- d. help solve specific agricultural problems of local and regional nature through applied and adaptable research,
- e. give students the opportunity of decision making and developing technical skills and enable them to be with sufficient know-how for economic, social and political self reliance,

- f. meet the shortage of appropriately trained middle level manpower in different fields of agriculture,
- g. enhance the dissemination of proven agricultural technologies to rural Ethiopia, or involvement in what was termed agricultural extension work.

Curriculum

The college's curriculum is designed to consist of both basic and specialized courses relevant in the field of agriculture. The basic courses are designed or tailored to meet the demand of students to become a well rounded agriculturalists. On the other hand the specialized aspect of the curriculum deals with specific theoretical and practical knowledge necessary for professional agriculturalists. On the other hand the specialized aspect of the curriculum deals with specific theoretical and practical knowledge necessary for professional agriculturalists. As suggested in various documents of the AJCA the success of this curriculum was believed to largely depend on students clear understand and appreciation of the dignity of labour.

Accordingly all production courses offered in each department were designed to contain class work and practical with a minimum of 80:20 or a maximum 60:40 respectively. In addition to this students of each department are required to take specialized practical of 3 hours per week with no credits but as part of graduation requirement. In summary the curriculum for the training scheme in AJCA has three major components:

1. Theoretical and applied course offerings,
2. Practical training in field-work experience and laboratory activities,
3. Residence training in rural area.

Awassa College of Agriculture (ACA).

In 1986 the junior college was made to Awassa College of Agriculture (ACA) when it started offering degree programme.

III. Research and Farm Centre

1. Historical Background of RFC

To ensure the implementation of the AJCA's intended training program with significant departure from the conventional lecture type instruction, the teaching learning process envisaged for the college tried to place strong emphasis upon the use of rural environment and demonstration fields. This

in turn required the availability of sufficient agriculture land and other necessary facilities.

While the college community was making every possible effort, the achievement of desired objectives was hampered for some seven years due to the very location of the college which was far from well developed infrastructure requisites, and more importantly due to the size of the land (22.5 ha.) which was very small for an agricultural college.

Among the identified problems that were said to be faced by the college due to the congestion created in the main campus in 1983 were:

- a. limitation of space to be used for teaching purpose which reduced the quality of practical training of students.
- b. lack of research capacity i.e. limited research infrastructure and limited research experience of staff members.
- c. lack of transport facilities, and lack of funds for procurement of feeds for college animals,
- d. hazardous environmental sanitation of the campus due to difficulties associated with the disposals of animal as well as other wastes,
- e. lack of adequate staff dwellings, offices auditorium etc; and uncertainties as to the future growth and development of the college and expansion of the infrastructure.
- f. growing difficulty to increase the college's budget from government appropriations and constant shortage of funds (revenues) to be faced and the need for revenues to meet them.

To overcome the constraints/problems mentioned above the college embarked upon series of public relation activities that opened up necessary channels of communication with all relevant institutions to acquire a farming land in or around Awassa town. As a result of such an effort the college for the first time in 1983 managed to obtain and own 400 ha. of land some 2.7 km away from the main campus. The location which was as near as possible to the camps was chosen for logistic reasons. The site was in the same administrative area, Sidamo Administrative region, Sidamo Awraja, Awassa Woreda on the east side of Addis Moyale road, with Sidamo Agricultural Development Enterprise and Awassa research stations operating around it as immediate neighbours.

After the acquisition of this land a project proposal to establish a research and farm centre was prepared by AJCA in consultation with the AID bank (Awassa Branch), Awassa State Farm and Awassa research stations.

According to the proposal, the research farm center (RFC) was established with the following general and specific objectives.

2. General Objectives of RFC

- a. To launch the development of the college in quality and in educational status,
- b. To be able to cover the unsatisfied demand of food and feeds of the various colleges,
- c. To disseminate innovations to the surrounding farmers,
- d. To exploit fully the know-how, manpower and energy available at the college.

The above objective could be interpolated to represent education, research, extension and production objective. In order to fulfil these general (long-range) objectives the following short and medium term specific objectives were stated:

1. To establish and strengthen the college farm so that it can accommodate all animals and plant production research and extension as well as practical training for students,
2. To satisfy at least partially, the food and feed needs of students and livestock under Addis Ababa University and Awassa city,
3. To act as the centre (parent) stock supplier for poultry production in AAU, and supply poultry and poultry products to university enterprises as well as to mass organizations of southern community,
4. To generate sufficient income, in the course of production so as to sustain the day to day requirements of the project as well as leave some margin for further investment.

3. Conditions existing in the Pre-Project proposal

Extensive land acquisition outside the main campus started in 1983, and continued up to 1986/87. But the college farm activity had started already earlier within the college campus

about 1978, as part of practical training curriculum and demonstration unit, totally run and supervised mostly by the overall college administration (that is the dean, administrator, and the general services personnel of the college) and only partially by the academic departments.

The farm activities within the campus were not without some positive spill over effects as their produces, especially vegetables, poultry, eggs, and milk products had started not only to partially supplement college students and staff food needs, but some were also sold to the surrounding campus-areas, and other AAU campuses whenever possible.

By 1980 the problem of coping with the farm activities of the college within the campus were glaringly pressing as they conflicted with the administrative services and the overall academic activity of college, met with severe financial constraints, faced space congestion, and became heavy load on the college academic administration as explained earlier on page

With more land acquisition outside the main college campus, it became clear the college farm activity needed separate administration, staff of its own and independent accounting of its finance. To this end a project proposal was prepared for a self-sustaining Research Farm in 1983, and submitted for funding to the University.

It is interesting to note here that although the AID bank (Awassa branch) was said to have participated in the preparation of a proposal for establishment research farm center, it was not involved in funding or considered as possible much of funding anywhere in the documents.

4. The Project Proposal for funding

When the project was prepared in 1983 the land was partially acquired and the remaining part was formally authorized by the regional authorities to be given to the college in near future. The main purpose of preparing the project was to present the document o Addis Ababa University which was then expected to provide the necessary fund for running the desired activities of the centre.

In the project proposal the college had tried to provide a rough time table indicating the expected pattern of the centre's development. Accordingly the project implementation activity was to commence in 1983/84 by simple production on 200 ha. of land. Parallel to crop production on this same area of land the centre have had a plan for 1984/85 to fence 400 hectares, construct sheds and move part of the college animals to the new place at the R & F centre. Construction of various

research and production facilities in addition to full-swing crop and animal production was scheduled for 1985/86. Further future production developments were left to be charted following the 10 year indicator plan which was then in vogue.

The fund needed to run the project activity was expected to be borne by Addis Ababa University under the assumption that the project will appear feasible/ acceptable to the university authority.

The project proposal for funding the Research Farm Center at ACA was submitted for approval between September 1982 and January 1983. However it was not approved it seems till the first quarter of 1983, and the farm RFC started operations in April 1983 (15 Miazia 1975).

The project proposal briefly contained general, short, medium, and long-term objectives (as described earlier page) and detail descriptions of the project area involved, geographical location, climate, and topography. Further the institutional advantages and supply inputs needed for the development were stated together with cost estimates.

The total project cost which required funding was presented as follows:

Financial requirements of the project for the first year:

Total funds requirements	Birr <u>504,079.05</u>
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Break down:

For Investment	Birr 211,422.40
For Operating Expenses	" 292,656.65

	504,079.05

Addis Ababa University was expected to finance

Birr 348,365.48

Break down:

For Investments	Birr 55,708.80
For Working Capital	292,654.68

	348,365.48

Other investments were to be estimated book value of college assets

Birr 155,713.60

Birr 504,079.08

The proposal further goes on to project output, and estimate operational results expected during the first year of operation as follows:

Revenues for 1983/84 operations (projected)	Birr 425,006.00
Net profit expected	Birr 109,648.07

The University seemed to have agreed to finance the project only to the extent of birr 250,000 loan with 3 per cent interest to be repaid over the five years period.

Progress report on the first six-months of operation (April - September 1983) shows that the major part of fund loan of Birr 212,178.00 was transferred to the college, but amounts used were on the other hand much more less, while results of operations were also unsatisfactory.

RFC's Cost Project Breakdown

According to the estimates presented in the project document, the total finance required for implementation of the RFC's initial plan was established to be Birr 504,079.05. this figure was reached by aggregating estimated expenses in the following areas of expenditure:

Area of Expenditure

1.	Investment	7,680.00	
	- Land Development	12,560.00	
	- Building & Construction	161,595.00	
	- Office furniture	6,935.00	
	- 12% Contingency	22,652.40	
			211,422.40
2.	<u>Direct Cost of Production</u>		
	- Machine Operation Cost	42,095.71	
	- Labour Operation Cost	47,208.00	
	- Material input	104,122.85	
	- 12% Contingency	23,211.19	
			216,637.75
3.	<u>Indirect cost of Production</u>		
	- Total Overhead Cost	74,396.92	
	- Contingency	1,621.98	
			76,018.90

	Total Estimated Costs of Running RFC		504,079.05

As the above breakdown of expenditure shows from the total Birr 504,079.05 estimated financial requirements, Birr 211,422.40 was assumed to go for investment while the balance Birr 292,656.65 was for working capital.

Sources of Finance

From the submitted project proposal documents it is clear that the Addis Ababa University (Head Office) and Awassa Junior College of Agriculture were taken as the only possible source of finance for RFC. Hence around 70% (Birr 348,365.45) of the needed fund was to be raised from AAU central Administration and the remaining 30% (Birr 155,713.60) from AJCA. The contribution on the AJCA's part was assumed to be the estimated book value of the college asset. This largely includes the farm machineries and implements transferred from overall college use to RFC activities. The value of these assets were taken to be an equivalent of birr 139,030, which nearly covers 90% of the finance estimated to be born by AJCA. The project document did not make it clear whether the contingency fund of birr 16,683.60 (12% of 139 030) was to be given by AJCA to RFC in cash, or in form of labour assignment from college duty to RFC, sharing office and other supplies or by way of providing selective subsidy and covering part of the indirect costs of production. If the latter is the case then AJCA did not in strict sense make itself ready for new financial commitment in a form of cash. It is understandable that this can be due to unavailability of budgeted fund for such endeavours or other reasons. Even if the former is the case it is presumed that the AJCA was to cover the expenditures in case of contingency only.

The general impression one can get from the document is that almost all finance needed for new cash outlays related to the implementation of RFC's planned activity was to come from Addis Ababa University, the other were only put as supportive fillers to beef-up the project proposal.

Fund Appropriation and Use

It is mentioned earlier that the total amount of money needed from AAU as requested by the project proposal was Birr 348,365.45. However, the university has approved and agreed to provide only Birr 250,000 in a form of loan. The repayment of this loan was agreed to be made in 5 years time from the date of advance with 3% interest change per annum on the outstanding balance.

After the officials approval of the Birr 250,000 loan, the RFC started its operation in April 1983. It is reported that from the total of this loan initial September 1983 only Birr

212,178 was advanced to the RFC by making three instalment deposits to RFC'S account. The balance (Birr 37,822) was transferred at a latter stage.

The fund made available during the first 6 months was quite enough to cover the necessary costs incurred at that time. Records show a balance of Birr 126,969.53 excess fund available and only Birr 85,208.85 used. In general all estimates made on the project proposal were on the high side. However, the farm managers, comment on the reason for lower actual costs than the estimate was that the use of college labourers did not properly reflect the actual amount of labour and materials spent on the farm. On the other hand in other reports we are told the project proposal was kept at reduced cost to induce acceptability of the project.

5. Vexing feature of the project proposal

The project proposal itself seems to have several financial conceptual framework deficiency:

1. What is included in investment costs is mainly expenditures for machineries and office furniture (180,986.40 + 21,834.40) almost 96 percent, which seems to fail to identify fixed asset expenditure in relation to current assets.
2. It describes the rest of investment as the estimated book value of the college asset. These are assets to be transferred to the farm mostly in form of farm implements and perhaps to be considered as the capital contribution of the college. Therefore they should not be considered as fund needs.
3. The operating expenses and investment needs identified are for a year and what is to happen after that or the financial projections for the rest is not considered at all.

Similarly revenues estimates and anticipated profits are projected only for a year. What happens after a year? Whether the same revenue and profit estimate is expected each year, and for how long? What happens to the net income? Is it to be used for repayment of loan or reinvestment? Answers for these questions are not stated anywhere.

4. Explicit and implicit costs in use of college manpower, such as that of staff and students and other administrative personnel, were not included in cost estimate. At times their use was even assumed to reduce needed expenditure.

5. The project proposal assumed production will be rainfed, and thus did not include cost of irrigation and water needed as was discovered later.
6. The repayment of the loan was not considered at all or lived up to the contract.
7. The project was prepared on broad statements of how to make college results attractive and encourage participation by the University and not on proved financial viability. Although some financial schedules were used apparently to highlight financial implications.
8. Revenue generating was not a part of the general objective unless it was left out for tactical purposes. (See page).
9. Involvement in pursuit of income generation was made apparent in order to sustain the practical and research aspect of the farm activity, because much needed funds to run the farm activity were no more available. In other words there were not enough funds from the budget to run the farm for practical training (demonstration sites), and the activity thus had either to be stopped or extended to sustain itself.

6. Land Appropriation and Utilization

As stated in page earlier the college's additional land appropriation for purposes of production and research started in 1983/84. The first 150 hectares of land was used for production of maize (66.7%) silage corn (13.3%) pepper (3.1%) Hay (13.3%) and 5.3% remained uncultivated.

During the following two years the land appropriation increased to 202 hectares and 208.4 hectares respectively. the year 1986/87 is a year in which a remarkable increase (up to 468.6 hectares) in land appropriation was observed (see table 2). Throughout the eight years operation under consideration the production of four major crops (maize, silage corn, pepper and hay) took the larger portion of the allotted land. Teff, wheat, onion, soyabean, etc. were produced only intermittently on relatively small areas. The reason for discontinuation of some crops production as suggested in some of the annual report of the RFC is the non-profitability of such products. But whether the others were really profitable we shall see later.

Of the total land under the college's possession the area allocated to research purposes has never exceeded 10 hectares (3%) in any year. The vegetable production project run by the

Department of Plant Science and Technology is reported to have used 0.6833 hectares of land in the year 1987/88 to produce variety of vegetables.

7. Crop Production

Ever since its establishment the RFC has been able to use at least 90% of the cultivable land under its possession for crop production every year. The fact that the acquired land was used by Sidamo Agricultural Development enterprise earlier (which probably has later imparted some experience to the college) the RFC did not seem to have taken time or spend money for weather, soil etc, studies before its embarking on the project. Rather corn was simply identified by RFC's 1983/84 production plan as one of the important crops to be produced followed by potato, pepper, and artificial hay. Accordingly a plan with specific targets of producing 6525 qt. corn, 1100 qt. potato, 300 qt. pepper, 4600 qt. silage corn and 882 qt. hay was set for 1983/84. The actual production during this plan period, however, was only 5% of the target for hay and 33% of the target for corn production. The production of other crops is achieved in a proportion between the above two, except potato which was not produced at all.

The annual production of corn (maize) increased from 2130 qt. in 1983/84 to 4721 in 1989/90, about 120% increment. The yield per hectare for this crop had also some signs of upward movement. Like wise pepper and hay production had also shown a little increment both in terms of total volume and yield per hectare. It is also observed from the annual reports of RFC that production of some crops like peanuts, wheat, soyabean onion etc. was decided by the R & F board to discontinue since the production of these crops were found to be unwise mainly for profit reasons. It is not clear, however, whether such decisions are made by taking into account the possible macro-level advantages and disadvantages which result from termination of one or more crop production in any year which if continued could strengthen students educational enlightenment about the particular crop in the process of training through actual production. It must not be forgotten that the RFC's practices are meant for facilitating the college's training objective apart from simple profit motive.

8. Financial Performance

Objective

The objective of RFC as an income generating activity directed towards a self-sustaining financial or business proposition was not specifically addressed to or articulated well to begin with. The RFC was established with multiplicity of objectives among which income generation was one of them but not the

primary objective of the RFC was the making of the agricultural curriculum more practical and production oriented.

Even the project-loan-proposal document was only partially perceived as a financial proposition. A one year projection of operational incomes were prepared to justify that the loan could be repayable. However projection did not indicate expectations beyond a year nor were costs estimated properly and repayments schedules foreseen. It seemed implicit that if the project did default it would be subsidised and bailed out by the government. As was indicated earlier the project was prepared only with making participation attractive.

It would be thus fair to say that the objective was mainly educational and production motive ridden, and income generation was something of a side-line goal and not an eventual self-sustaining goal. As such it is not surprising the project proposal was less than articulate in terms of financial cohesiveness, cost computation, and repayment commitment and self-financing strategies.

This phenomena is usual to find in many of the higher educational institutions, because any of their activities are primarily initiated first as "educational" such as the provision of ancillary services or making the education more practical, and "income generating" purpose only as secondary goal. This is fine as there is an equity fund, but the moment debt finance is involved the first and foremost concern must be to ensure the activity's repayment capacity before committing funds.

Financial Profitability

Analysis of available financial data of seven year, since 83/84 the start of the RFC operations, shows fluctuation but not unsatisfactory results. (See Table 5).

A look at the various reports show that there are positive profit margins across the operation years. While there was a record not loss of Birr 7562 incurred during the first year of operation 83/84, profit figures gradually rose up to Birr 232,750 in 89/90.

Revenues increased from Birr 100,000 to 450,000 or by 30% in the first four years (83/84 - 86/87). On the fifth year there was a decrease to Birr 300,000, then rose up to 469,000 and went down to Birr 295,000 in 90/91. Expenses increased from birr 121, 000 to 244,000 in the first four years of operations (83/84 - 86/87) or by 101%. For the fifth year expenses were relatively down to Birr 198,000, then went up to 236,000 and down to 223,000 in 90/91.

Overall revenues have been on the average around Birr 300,000; while expenses averaged Birr 194,000 per year; and surplus (net income) averaged Birr 127,000 per year.

For the period under observation revenues have grown much faster than expenditures. The expenses have remained at about Birr 100-200,000 per year, while revenues have oscillated from low of 100.000 to a high of 460,000.

In comparison to government budgetary appropriation of the college the average annual revenues of the RFC represent about 18 percent of (320/1754 (the average annual released government budget, (see Table 4); while the RFC annual expenditures represent 11 percent (194/1835) of the budget released to it by the government. Thus the college has been spending on its RFC the equivalent of 11% of the budgetary expenditure. In absence of the RFC what would have happened? There would be no production activity and no implementation of practical educational curriculum, or the government has to increase the budgetary allocation for such activity.

Again compared to government budget allocation, specifically budget released and spent (see schedule 5), it is observed that the college overspent its budget allocation by 10 to 7%. We can only assume that this could not have happened unless extra funds came to be available from the RFC generated revenues.

Assuming Birr 100,000 profit surplus (net income) per year then definitely the loan of Birr 250,000 could be more than repaid by the RFC activity. However up to now there is no evidence of the loan being repaid to the university. The explanation that seems to be found in the reports has been that the net income (surplus) has been reinvested. We can assume therefore the college's total assets should have grown-up at least by Birr 600,000.

Whether these are visible in fixed or in current assets, the available financial data do not permit analysis. However if the RFC now is running on itself without requiring additional government budgetary allocation for the practical side of the curriculum, then we can say that it has been successful in its income generating activity to sustain itself, even though its debt still remains unpaid.

Assets and Liability

The RFC total assets are rather difficult to discern or establish because

- there is no balance sheet of the RFC ever prepared.

- the land or land improvement costs (or expenses) have not been capitalized separately, though some were recognized as planned operating expenditures at the beginning under investments. Given the socialist thinking we had, it is understandable why land is not capitalized, but non-capitalization of land improvement cost cannot be condoned.
- It can be observed that under investments have been included farm-implements and agricultural-equipment costs which were considered as operating expenses initially and then continued to be reported under depreciation expenses annually, but they are nowhere visible as assets on hand and no final report ever shows their status on hand. I am sure that this is a result of absence of proper accounting systems and failure to prepare balance sheet.

The writer is personally aware the college had obtained a technical assistance for its farm project from GTZ which have not been reflected in any of the reports we examined.

In official records we can only find confirmation of loan which is understood to be still outstanding. Other loans have not been disclosed in any of the reports although informal information seems to indicate they may exist.

Given the capitalization of earning as explained earlier at about Birr 600,000 and a total debt not to exceed 250,000, the net worth of the RFC should be up by at least Birr 350,000 now, unless the net earnings have been used as running costs in which case we can say the college is definitely covering its running costs but with funds subsidized by the university via the RFC.

Reliability of Financial reports and data

the available financial data and reports are rather inadequate and their reliability highly questionable. Most of the annual reports prepared are much more management explanation of production results rather than appropriate financial statements. The financial reports attempt to give semblance of income and expenses summary but the itemized data contain a mix of cash and accrual bases of accounting. For example depreciation is included under expenses. Thus when one sees net income, it is not clear whether it is prepared on cash or accrual bases.

9. Management

The reason for the establishment of RFC as separate unit outside the college main campus was not only the crowding facilities and space condition, but also the conflict that

arose among administrative personnel and academic staff in supervision and running of the farm activities within the college campus. It was thus obvious that such a unit outside the main campus cannot be administered by the existing college structure, personnel, and staff.

Thus a board was established to oversee to formulate policies and oversee the running of the RFC, and a manager appointed to supervise the day to day operations of it. Other administrative functions and services were made to be provided through some type of arrangement for centralized overhead services to be availed to the RFC by the college with specific person being responsible specifically for follow up of RFC activities.

This has not been without problems because shared personnel and facilities as much as they may save cost they are also cause for bottlenecks and conflicts.

It is important to note here how in a revenue generating activity project it necessary to have appropriate support and build proper relation with relevant organizations or individuals that might have a say or stake on the matter. It is important to influence, convince, sell a project, and obtain support. The ACA Dean was especially good in this, to convince and win the needed support of the Ministry of Agriculture (MOA), The ONCCP, the State Farms, and the Regional Administrative office and the West Germany Technical Association Agency (GTZ) and solicit their commitment in RFC.

Naturally this is true of any activity but more so in an educational institution that might be pursuing an income generating activity which might be considered as encroaching on viable private business undertakings. Especially, if educational institutions cannot do it efficiently and rationally at competitive level there would be opposition and obstacles against their entry into the business which leaves them only with purely educational or research objective reasons.

Management and Manpower

The RFC's crop production activity as a whole is known to under the responsibility of AJCA's management. The specific affairs of the centre are, however, set to be dealt by a board established for this purpose, while the execution of various operational plans and the day to day follow-up is given to be carried by the farm management unit headed by a farm manager.

Both the RFC project proposal prepared in January, 1988 and the annual reports issued during the centre's operation periods indicates the centre as having its own skilled and un-

skilled manpower necessary for running the production activities. Except few expressions of acknowledgement forwarded by the farm manager for the overall cooperation of teaching and administrative staff of the college (an acknowledgment which is similar to that given for IAR Awassa branch, Ministry of Agriculture etc.) there is no specific indication as to the amount man-hour put (in terms of labour and know-how) either by the teaching staff or students of the college. As such lack of clear information on the degree of teaching staff and students involvement in the production process makes the evaluation of the financial performance of the crop production difficult, while it becomes hard to establish whether the crop production is to be taken as part of the college's practical training program, or as an independent business established for revenue generating, and to what extent it could be distinguished from the education, research extension and production-training objectives of the college.

Management Problems

The management of RFC seems to face little problem regarding the human side of the project. The cooperation it received both internally (from farm workers, college community etc.) and externally (from officials in Agricultural organizations and local regional administrative offices) have been all the way positive and as such there was no major problem visible in any of the RFC reports. All staff, students have been working happily in harmony like a family.

What are repeatedly stated as pressing problems of the RFC are mainly material and technical in nature. Among these the major problems are:

- difficulties to cope-up with the weather which tend to vary from year to year.
- shortage of appropriate chemical supplies.
- shortage of tractors and machineries accompanied by obsolescence of existing ones and unavailability of spare parts.
- shortage of fertilizer supplies.
- lack of enough market for outputs.

Summary and Conclusions - ACA

The AJAC was established in an attempt to introduce an innovative agricultural education that will ameliorate previously established colleges' agricultural education

practices in the country. To this end the AJAC educational curriculum was designed with class work and practical of minimum 80:20 and maximum of 60:40 (ratio respectively). Students were thus required to spend to the extent of 3 credit hours per week (out of 15 Cr. hours per week) in practical field work as part of graduation requirements.

The curriculum had therefore three major components:

1. theoretical and applied course offerings
2. practical training in field-work experience and laboratory
3. residence training in rural area

The commitment to practical work oriented educational curriculum necessitated agricultural activities in demonstration fields for students practice and experimentation. Agricultural production activities that involve vegetable garden, poultry, and dairy were thus started within the campus as part of crop and animal production and protection studies.

However by 1980 the crop and animal production activities on the campus were creating problems as poor sanitary conditions and congested facilities became evident and highly visible.

- limitations of space for teaching purposes and for qualitative practical training of students
- lack of plots for staff research, limiting staff research capability
- difficulty in animal feed procurement due to lack of funds, transport facilities, and general shortage of supply.
- hazardous sanitary conditions due to congested campus facilities
- constant shortage of funds to run the program, difficulty to obtain budgetary increase from government, and need for income to meet fund needs

Consequently the need for additional land in order to provide space for extended practical work for students and research plots for staff was extremely felt and pressed for. Further, it was rationalized that an additional land would enhance its agricultural production capacity to produce own animal feed necessary for its animal production and grow food to supplement consumption which will cover up deficiency in food

budget. The college embarked on series of public relations work to secure necessary approval for expansion of its facility and to acquire land for developing a farm center. In this endeavour there were clear factors which elicited positive reaction on its proposal. As these were times of overwhelming concern with famine and food shortage in the country, any proposal for enhancing agricultural production capacity anywhere was more than welcome initiative to be encouraged, especially agricultural production related income-generating activity. The college thus obtained government support to acquire land. When the college obtained government support to acquire land for expansion of its agricultural production activity, the need for funds for developing crop and animal production projects on them became mandatory, and feasible. As needed funds, however, could not come from additional government budgetary allocation, a serious consideration was given to securing a loan fund.

Let alone an educational institution of higher learning even a government agency is not permitted to borrow money from the without central government approval. Even if the college was not prevented by law of the country it would have been hard for commercial bank lending agency to find the undertaking viable for investing a risk-capital into. Although the project proposal for establishing the research farm center is said to have been prepared in consultation with the AID bank (Awassa branch), the AID bank was not even considered as possible source of funding. If the purpose of AID (Agro-Industrial) bank as its name suggested is for enhancement of agricultural production by facilitating agricultural credits, then the college (ACA) could have made good use of the bank's agricultural credit funds in this project proposal and could have brought a much more extensive economic "multiplier effect" than poorly organized farmer or farmers which the bank was looking for to put its money in.

The college had to revert to the University (AAU) under whose jurisdiction it was to obtain the needed funds in form of loan to be repaid from the income expected to be generated from the agricultural production activities in the Farm Center to be developed. The university considered the project of double benefit as:

- a) it encouraged productive agricultural education,
- b) it promoted an income-generating activity that will pay itself in the long run and assist in budgetary deficiency.

In summary it can be said that the project first was conceived as expansion of an educational objective primarily and only second as a financial objective, though in order to secure the loan a schedule of financial needs and rough estimate of

expected income to be generated was prepared to support such it hard to see the project proposal being presented as a financial proposal in the strictest sense. Since no adequate financial forecast and financial feasibility study were made it is hard to compare its success or failure vis a vis its predicated intents.

Performance Evaluation

In evaluating the performance (success or failure) of such a project activity we are confronted with conflicting criteria. Is it to be evaluated in terms of educational objectives or financial objectives? or educational performance criteria, or financial performance criteria?

To evaluate it on its financial performance there is lack of financial information, and even from the beginning there seems to be no proper consideration given to financial factors in terms of preparation of feasible financial proposal, appropriate costing mechanism. Later on poor record keeping and absence of adequate financial, for analysis or deficient accounting treatment of depreciation, capital and revenue expenditure, and determination of net income or surplus. Under such conditions it may be difficult to confidently indicate financial performance evaluation.

In terms of educational objectives there is an overwhelming physical evidence in the campus and the Farm to witness the transformation of the grassland that has been developed into crop growing plots, the number of cattle and chicken on the farm, in addition to vegetable farms; then the modern agricultural machines and equipment in possession, the well-fed healthy looking students of the college who have been the beneficiaries of the agricultural products of the farm.

All these indicate a substantial wealth or net increase in total asset on hand, though what liabilities due exist is unknown except for the amount borrowed from AAU which remains unpaid to the extent of available information. The capacity of these assets to repay for whatever liabilities will be due or come to be known in the future also is not determinable.

Table 1
Awassa College of Agriculture
Students Enrolment Graduates, Teaching Staff
Appropriation and Expenditure (1976/77-1990/91)

Year	Students Enrolment	NO. of Graduates	Teaching Staff	Budget Per Annum (Released)	Expenses Per Annum	Annual Expenses Per Student	Remarks
1976/77	257	-	-	-	-	-	
1977/78	429	-	-	-	-	-	
1978/79	583	182	-	-	-	-	
1979/80	625	336	-	1,496,167	1,687,113	2700	
1980/81	505	237	-	1,562,789	1,647,274	3260	
1981/82	529	253	28	1,456,726	1,670,194	3160	
1982/83	524	242	32	1,488,360	1,717,101	3280	
1983/84	562	251	34	1,654,424	1,740,127	3100	
1984/85	616	271	37	1,909,176	1,922,766	3100	
1985/86	633	265	35	1,678,000	1,804,656	2850	
1986/87	581	262	65	1,774,752	1,877,666	3200	
1987/88	582	210	37				
1988/89	592	229	41				
1989/90	588	209	41				
1990/91	681	DNA	42				

* Regular Program

Source: (1) HEMD annual figures and facts
 (2) Geremew Haile (Oct. 1987)

Table 2
Awassa College of Agriculture
Research and Farm Centre
Appropriation and Use of Land (1984/85 - 1990/91)

Year	Area of land Appropriated	U S E								Remarks
		Maize	Silage Corn	Pepper	Hay	Teff	Research	Uncultivated	Other	
1983/84	150 ha.	100 ha. 66.67%	20 ha. 13.33%	4.7 ha. 3.13%	20 ha. 13.33%	-	-	5.3 ha. 3.53%	-	
1984/85	202 ha.	109 ha. 54%	20 ha. 10%	14 ha. 7%	50 ha. 25%	-	3 ha. 1.5%	- 6 ha.	6 ha. 2.5%	Other includes 5 ha. onion and 1 ha. peas
1985/86	208.4 ha.	82 ha. 39%	20 ha. 10%	21.9 ha. 10.5%	50 ha. 24%	29.5 ha. 14%	5 ha. 2.5%	-	-	
1986/87	468.6 ha. of which 70.5 uncultivable	131.9 ha 33%	7.08 ha 2%	52 ha. 13%	94.8 24%	12 ha. 3%	10 ha. 3%	11.52 ha. 3%	78.8 20%	Percentage is calculated as proportion of cultivable land of 398.1 hectares. Others include soyabean & wheat
1987/88	Same as above	176.1 ha	7.4	40.1	94.8	8	7.4	21.3	43 ha.	% calculated as proportion of 3981.1 ha. land. Others include 22.9 wheat 17 ha. soyabean and 3.2 ha. trees.
1988/89	Same as above (86/87)	137.4	7.6	50	94.8	22	-	-	-	
1989/90	Same as above	138.4 35%	11.6 3%	52 13%	106.9 29%	-	-	-	-	
1990/91	Same as above	145.45 37%	32.1 8%	50 13%	86 22%	60 15%				

Source: Annual Report of R & F Centre of ACA.

Table 3

Research and Farm Center
Major Crop Production Pattern (1984/85-1990/91) (In quintals)

Year	T y p e o f C r o p											
	Maize		Pepper		Raj		Onion		Teff		Wheat	
	Output	Yield per ha.	Output	Yield per ha.	Output	Yield per ha.	Output	Yield per ha.	Output	Yield per ha.	Output	Yield per ha.
1983/84	2130	19.5	63.84	4.56	16128	2308	-	-	-	-	-	-
1984/85	1442	13.2	206	14.7	48998	1638	25.9	6.4	-	-	-	-
1985/86	2099	25.5	296	13	95358	1918	-	-	180.48	6.33	-	-
1986/87	4500	34.1	400	7.6	154578	1638	-	-	56	4.6	730	15.3
1987/88	4563	27.6	259	6.4	61318	658	-	-	57.5	7.1	208	9.1
1988/89	4000	29.1	175	3.5	200008	2168	-	-	224	10	-	-
1989/90	4721	34.1	-	-	285008	2678	-	-	-	-	-	-
1990/91	-	-	1010	-	306248	3568	-	-	-	-	-	-

Source: Annual Reports of R & F Center

B = Bel (Unit of Measurement) = 20 kg.

Table 4
Awassa College of Agriculture
Budget Proposed, Approved, Released and Spent
(1979/80 - 1986/87)

Year	1 Proposed	2 Approved	3 Released	4 Spent	4 as a % of 3	Difference (4 - 3)
1979/80	2,148,617	1,883,470	1,496,167	1,687,113	113%	190,946
1980/81	2,379,989	1,787,573	1,562,789	1,647,274	105%	84,485
1981/82	2,703,503	1,836,786	1,456,726	1,670,194	115%	213,468
1982/83	2,563,992	1,871,586	1,488,360	1,717,101	115%	228,741
1983/84	3,118,960	1,737,039	1,654,424	1,740,127	105%	85,703
1984/85	4,426,758	1,843,047	1,909,176	1,922,726	101%	12,350
1985/86	5,478,717	1,851,999	1,678,000	1,804,656	108%	126,656
1986/87	6,339,969	1,799,652	1,774,752	1,877,666	106%	102,914
Average	-	-	1,627,270	1,758,375	-	-
Average 83/84 - 86/87	-	-	1,754,000	1,836,000	-	-

Table 5
Awassa College of Agriculture
Research Farm Center
Revenue, Expenditure and Surplus
(1983/84 - 1990/91)

Year	Revenue	Expenses*	Surplus	R e m a r k s
1983/84	113,227	120,788	(7,561)	1980 E.C. Amh./Eng. report
1984/85	204,108	179,068	25,040	" " "
1985/86	357,615	155,648	201,967*	1977/78 Report (English version)
1986/87	463,262	243,896	219,356	1981/82 Report (estimate not actual)
1987/88	338,209	198,717	139,492	1980 E.C. Amharic/Eng. Report
1988/89	468,770	236,021	232,750	1980/81 Report
1989/90	-	-	-	Income & Expense of the year not reported
1990/91	294,811	223,272	71,539	1982/83 RFC Report (Amharic version)
Average	320,000	194,000	127,000 148,000	Including loss divided by 7 years Excluding loss divided by 6 years

IV. Addis Ababa University - Poultry Farm at Debrezeit

Historical background of Debrezeit Junior Agricultural College (DZJC), Agricultural Research Station (ARS), and the Faculty of Veterinary Medicine (FVM).

1.1. Debrezeit Junior Agricultural College (DZJAC)

The Debrezeit Junior Agricultural college (DZJAC) which was founded in 1977/78 under the AAU was established in order to enhance the agricultural endeavour of the country as Ethiopia's mainstay of livelihood was agriculture. This step was significant in that its formation came right after the experience of severe draught and famine in Ethiopia in the early 70s which brought the downfall of the ex-king Haile Selassie.

The two year diploma program in animal science, crop science, rural economy and social development was envisaged to produce middle-level manpower needed to work with the local peasant association and cooperatives in rural development projects.

1. To assist, promote and be involved in national program of conservation and afforestation of regional and rural development projects.
2. To expose trainees to rural environment through practice oriented program.
3. To inculcate in students the respect for their profession through field practical in dairy, poultry, and crop production etc.,
4. To participate and support refresher courses, in-service training, workshop, conferences, seminars etc.
5. To supply middle-level manpower and bridge the gap between experts and un-skilled workers.
6. To stimulate increase in food production capacity through research and experimentation
7. To develop appropriate technology in food production and farming system.

1.2 Agricultural Research Station (ARS)

Before the founding of the junior agricultural college, the AAU used to have a very well renowned Agricultural

Research Station (ARS) at Debre Zeit, where many improved seed researches and agricultural experiment plots were carried on. The research results were not without success, as "elite varieties" were obtained in teff, wheat, and chickpea. Thus the research station had an agricultural research experience of 20 years before the DZJCA will benefit a lot from the activities and staff of the research station. By 1980 the DZJCA had a total enrolment of 500 students.

1.3 Faculty of Veterinary Medicine (FVM)

In 1963 a school for training middle level veterinary assistants was established at Debre Zeit close to the ARS. It was run by the Ministry of Agriculture. In 1979 its curriculum was revised and the institution converted into a Faculty of Veterinary medicine offering six-years doctorate program in veterinary medicine under the aegis of the Addis Ababa University. The Faculty had a total enrolment of 349 in 1989/90

The aims and objectives of the Faculty of Veterinary Medicine were identified as follows:

1. To provide an educational program leading to the attainment of veterinary medicine degree
2. To cooperate in the production and education of paraveterinary personnel.
3. To promote basic and applied bio-medical research.
4. To disseminate appropriate information through publications, newsletter, extension services, and other suitable channels.
5. To promote diagnostic and consultative services on animal disease problems.

In 1980 the DZJAC program was folded into Alemaya University of Agriculture (AUA), and the DZJAC facilities were turned over to the Ethiopian Management Institute (EMI) training center, while the ARS was made to continue to exist as an entity under the Alemaya University of Agriculture (AUA).

1.4 Debre Zeit - an agro-business center

Before the revolution in February 1974, Debre Zeit located at 50 Km south East of Addis Ababa used to be the center of many chicken and cattle breeding projects,

especially poultry and dairy farming was becoming popular agro-business undertaking. Several businessmen, particularly few enterprising Alemaya Agricultural college graduates had started few not unsuccessful poultry and cattle farms at Debre Zeit. Some of these were above take-off point as commercial going concern when the revolution erupted. Among them was the DEZEOL, a privately owned poultry farm within Debre Zeit town located very close (2.5 kms) to the Agricultural Research Station (ARS), the Veterinary College, and later to the Junior College of Agriculture.

It was evident that the Debre Zeit was developing to be the town of an agro-business center. On one hand there was the academic interest in agricultural production (animal science production and protection and crop production) through the ARS, the Veterinary College, and the Agricultural College later, and on the other hand there was highly viable business of chicken and beef production and marketing. The academic interest and business interest were definitely at very promising cross roads. However, it was precisely at this juncture that the revolution brought the demise of private business enterprises where entrepreneurs of the poultry and dairy farms began to leave their business in ruins selling at realisable value before the government nationalised them, or just left them in-trust of someone to encounter natural death.

2. Animal Husbandry Activities and Purchase DZEPOL

As animal science (or animal husbandry) was part of its agricultural training programme, the DZJAC had started limited animal breeding activities on its campus, specifically, that of chicken and cattle breeding mainly for teaching purposes.

The produce of these activities, i.e. eggs, milk, and meat (of whatever quantity available) were used for student feeding thereby improving the quantity and quality of cafeteria menu, and supplementing government food budget which was always inadequate. If there was any excessive supply they were made available for sale at reasonable prices not only to the college staff, but also to the AAU staff in Addis Ababa. It was always a pleasant occasion for AAU academic and administrative staff alike to go on university business to DZJAC, as this was an opportunity to purchase chicken and eggs at very reasonable prices, especially in days close to the Ethiopian festivals.

However these activities were far from business motivated goals but rather by products or spill-overs of the teaching practices. certainly the College as such did not look at it or made an effort to pursue deliberately with vigour, though some of the employees or staff were not without an eye for such an opportunity even before the establishment of the College. It was however an open secret that the college through some of its daring leadership was albeit quietly making limited income from this but refrained from pursuing it as declared objective for fear that its budget might be cut accordingly, or perhaps would have to surrender its surplus from such income to the university or the government.

As mentioned earlier Debre Zeit, in the pre-revolution period, was a town where chicken and cattle breeding and dairy was thriving business endeavour. It is impossible for ARS, and later for the College staff not to be influenced or take note of it. Surrounded by the chicken and cattle breeding enterprises and its interest in animal husbandry training it was natural for the College to be inspired in the business as well. After the revolution, as private business enterprises in these activities were closing, and the DEZEPOL farm located 2.5 kms from its campus was one of them, the College became interested in enlarging its activities in these sphere.

The Addis Ababa University also saw the market opportunity of the far, and the advantage of the college staff expertise for embarking on an income-generating activity which will be of benefit to the overall university resource mobilisation purposes. The university top leadership was favourably disposed to entering into such venture. Convinced of the feasibility of such a project for generating much needed funds (resources) internally, the University purchased the DEZEPOL farm from the representative of the private owner on April 1981. The advantage of DEJAC, ARS, and the FVM for the DEZEPOL or vice versa were important factors in the acquisition. Following are the advantages considered then.

1. The research activities conducted by both the FVM and JAC in the area of animal science, plant science and other agricultural activities could help the poultry farm produce better quality poultry and other agricultural products;
2. the research output can be used for mass production of poultry which will help generate substantial profit at minimum cost of production;

3. medical care and well-balanced feed can be arranged for chicken and domestic animals;
4. the poultry farm will help strengthen the long established research activities of ARS and provide practical training and demonstration center for the JAC teaching objectives.

From the demand side it was established that:

- there was abundant demand for poultry products to meet through the poultry farm as there was shortage of supply due to the closure of the many private poultry farms in Debre Zeit.
- Debre Zeit and Addis Ababa grocery stores were very much interested in obtaining continued supply of eggs and broilers.
- there was a very conspicuous shortage of eggs supply in the country at large, and the poultry farm could help alleviate the national shortage and contribute to the national output of poultry products.

The main objectives of the purchase of the poultry farm were stated as follows:

1. to undertake educational research in poultry production
2. to study the market for poultry products
3. to study the need for animal feed, its production, and distribution at minimum cost. This meant experimenting with different types of feed for the chicken through the ARS and the AJC.
4. to meet the large local market needs for products, especially in the university community, big and small hotels in Addis Ababa and urban community.
5. to extend the poultry farm products stage by stage to:
 - pig and sheep production
 - cattle fattening
 - vegetable and other products.

As can be seen from the stated objectives most of them are directed to research goals. This was perhaps understandably made in order to minimize or avoid criticism from the government and others, of the university entering into profit motivated business activity which, during the Socialist ideological climate of the time, was not accepted in toto. This way the acquisition is assumed to be facilitated without too much opposition. But this was more of strategy rather than real aim, for it was open secret that the main purpose was financial objective.

3. The DEZEPOL Farm

The DEZEPOL farm was purchased in April 1981, at Birr 112,000 to be paid Birr 60,000 at the beginning of the agreement and the balance after effecting the complete title transfer and property handover. The DEZEPOL farm included the following:

Land (sq. meters..)	5 Hectares
Buildings (declared good condition).....	Birr 60,000
Equipments (declared mostly old).....	Birr 31,945
Stock of birds (declared old).....	Birr 3,000
Vehicles (declared old).....	Birr 11,000

Total estimated Cost	Birr 112,000

Employees transferred:

1 GM position.....	
1 Driver.....	
6 Handymen.....	-----
Total monthly salary	Birr 1,100

The broiler house was declared to accommodate 10,00 broilers at a time. To begin with it was expected to start with 4000 and slowly expand to full capacity. Plans were to be ready for marketing of products within 10 weeks, and produce at least seven bunches of broilers in 18 months.

Management

The DEZEPOL farm started operations in December 1981, 7 to 8 months after the purchase, when a Managing Board was appointed by the VPBD to supervise closely its operations.

The managing Board composed of members of the JAC and FVM and ARS was as follows:

1. Dr. Fisseha Gebreab, Dean of FVM.....Chairperson
2. Dr. Asfaw Zelleke, Director of ARS....Member
3. Ato Abebe Hailu, staff of ARS and
Manager of the farm.....Member
4. Dr. Tsehay Neway, staff of JAC.....Member
5. Ato Yohannes Gebremariam,
Administrator of JAC.....Member
6. Ato Solomon Teshome, Employee of
Development Project (AAU).....Member and
Secretary

The responsibilities and duties of the board were stated as follows:

1. to be responsible for the overall management of the poultry farm
2. to initiate development projects for diversifying the existing poultry farm activities
3. to study weaknesses in the poultry farm operations and recommend improvements
4. to review financial reports of the farm periodically and advice the VPBD on efficient utilisation of resources
5. to review existing practices and procedures to enable the more efficient generation of profits
6. approve annual budget and monitor its proper usage.

During the period of its complete transfer to the university ownership, the farm was managed by a manager named Dessalegn Kaptihyemer who was transferred from the employment of the previous owners. The experience of his handling matters were not found to be satisfactory, and as he was supposed to be reporting directly to VPBD at AAU head office where the chain of command was long he did not have immediate supervisor to monitor his activities. It was thus decided to establish a more formal and immediate chain of command with an organisation structure having Management Board, and a manager capable of running day to day activity, and reporting to the board, This led to the appointment of Ato Abebe Hailu.

Ato Abebe Hailu the first formal manager of the farm was a person with an agricultural degree, and a staff member of the ARS who had previous experience in running a farm. He was appointed on december 1981 and served until 1983. The budget proposal submitted by him for the first 18 months for operations was close to Birr 463,000: (Refer to the following Budget Proposal and Income Statement).

Proposed Budget and Projected Income Statement
of the Poultry Farm
For the First 18 months of Operations
Beginning December 1981

A. For capital expenditure and purchase of poultry

A.1 Capital expenditure.....		Birr 73,000
A.2 Operational expenditure		
Salary		33,160
Non-salary		
Feed and broilers	242,820	
Others	<u>75,410</u>	= 318,230
Contingency		<u>38,539</u>
Total projected budget		<u>462,929</u> <u>=====</u>

B. Projected income statement for the period.

Revenue from sales		
Eggs	Birr 302,400	
Broilers	140,000	
Culled hens	<u>22,800</u>	= 465,200
Six months old pullets	<u>40,000</u>	= 505,200
Costs of production		
purchases of chickens, feed,		
labor input and contingency		<u>395,259</u>
Net Income		<u>109,941</u> <u>=====</u>

How much of these investments were put into the farm, and what was the result of the operations during the said period is impossible to find. All that is known is after 18 months . Ato Abebe Hailu resigned form the Managerial post assigned to him in addition to his regular teaching and research activities.

After the 18 months period the management of the poultry farm was transferred to Ato Solomon Teshome who was earlier a contract staff member of the University Famine and Rehabilitation Organization (UFRO). During his period of term there were may reports that indicate of his handling matters that reflect dishonesty, misappropriation of funds, and removal of property. It was during his time that the farm is supposed to have lost Birr 20,000 in cash from sales. To begin with it seemed the property of the whole farm was not properly transferred to him from the previous manager. It was reported for example that the farm had at the beginning 12,066 broilers chicks, and later had additional 2050 broilers on record. But by May 1984, at time of his apprehension there were only 1673 chickens left, the rest being lost unaccounted. It is reported that the University had instituted appropriate legal proceedings against him. He was detained and court proceedings held, but matters got protracted that the entire Board was summoned to court for contributory negligence and poor and inadequate supervision on the matter. He was dismissed from his post, but the University was not able to recover anything from him.

After the departure of Solomon Teshome, the farm was left fallow under the temporary supervision of JAC for about one year until Ato Abebe Hailu was reappointed as Manager again in September 1985. Ato Abebe continued to run the farm till the ARS was completely transferred to be under the Alemaya University of Agriculture (AUA), when the DEZEPOL farm was transferred and handed over to the FVM in September 1986.

4. The Cattle Fattening Project at DEZEPOL Farm

After a lull period of more than a year during which the farm's performance deteriorated to a point of shut down, the University authorities reconsidered its status seriously and decided to transfer its supervision and operations to the Faculty of Veterinary Medicine (FVM). The farm was officially transferred to FVM effective july 1, 1986 (1979 E.C>0. The FVM proposed a Cattle Shading and Cattle Fattening Project for operating on the farm.

The main objectives of the Cattle shading and Cattle Fattening Project were:-

1. to meet the extensive need of beef meat for student cafeteria staff lounges and the University Community at competitive price.
2. to extend the Cattle shading and Cattle fattening project to
 - 2.1 pig and sheep production and
 - 2.2 vegetable and agricultural projects.
3. to produce different type of animal feeds.
4. to give practical experience to students of the Faculty of Veterinary Medicine.

The Addis Ababa University has been trying to develop different means of generating internal revenue to subsidize the existing University activities by new academic and development ventures. Cattle fattening project was considered to be a viable development projects which could be used to generate internal revenue to alleviate some of the financial problems of the University. Such a project was also useful to give practical experience to students. In addition, the products of such projects could be sold at a competitive price to students cafeteria, staff lounge and the University Community at large, fulfilling a very useful social objective.

4.1 Inception and Objectives of the project

The project was reopened in December 1987. The University was then facing high price of beef meat for students cafeteria and staff lounges, and the poultry farm compound of the University at Debre Zeit was found to be large enough and with facilities to start a cattle fattening project to counteract the problem.

Specific objectives of the project were thus reentrated to be:

- a. to supply beef meat to students cafeterias of faculties and colleges of Addis Ababa University and hence substitute private dealers who supply beef meat for high prices.
- b. to supply beef meat to staff and workers lounges of faculties and colleges of Addis Ababa University and

- c. to provide practical experience to students of veterinary medicine.

4.2 Activities of the Project

The project was envisaged to have two major and one supplementary activities

- a. Cattle shading Purchase and keep cattle for student cafeterias until demanded.
- b. Cattle fattening. Purchase cattle for fattening purpose. The animals are fattened and sold live to staff lounges and University community.
- c. Supplementary activity Vegetable production and sheep fattening. So far only one batch of sheep have been reared while vegetable production are only occasionally carried out using the available resources with small additional cash expenditure.

4.3 Farm Size and Project Facilities and Investment

The farm is located about 2.5 km. from the Faculty of Veterinary Medicine on the ex-poultry compound. The road connection to market outlets and the Faculty is good and acceptable. However transportation service which is essential for close day to day communication with the Dean, Administration, Finance and Veterinary services of the Faculty of Veterinary Medicine was not available. Telecommunication service between Farm and the VFM was also non-existent. These were cited as hindrances to efficient operation and increase in cost of farm operation and wasteful time. The project had no problem of water and electricity. Many overhead expenses such as pick-up vehicles services for the farm are provided by the Faculty intermittently on "if and when available" basis.

The overall size of the compound on which the farm is located is about five hectares and the cattle fattening farm which has an L-shaped barn is reported to have a capacity of 120 cattle. Almost all investments in terms of building and equipment were made before the farm was reopened. A list of farm facilities in use during 1991 is given in table 1 below. This is the extent of the information on total farm equipment (or assets) that could be obtained.

Table 1

Qty	Item	Description	Source
1	Tractor	Old Fiat	Ex-poul. Farm
1	Disc Plough	Old/used	" "
1	Disc harrow	"	" "
1	Trailer	"	" "
1	Molasses Tanker	3000/lt.	Cattle farm
1	Water tanker	1000/hr Capacity	Purchased 1987
1	Weighing scale		Purchased 1988
1	Mill	10/qt/hr	Ex-pul. Farm
1	Feed Mixer	10/qt capacity	"
3	Water Pump		2 from Ex-Farm 1 Cattle Farm
1	Peugeot pick-up		A.A. University
1	Office Building		Ex-Poul. Farm
1	Store		"
-	Barn with water and feed trough		Cattle Farm
-	Cattle handling facilities	poor condition	Cattle Farm
-	Slaughter house	poor design	" "

It is reported that the only investments made for the cattle fattening farm were barn construction, weighing scale, slaughter house, cattle handling facilities, and one water pump. The rest are all transfers from the Ex-poultry farm. The initial cost of most of the investments are unknown. Organized inventories are absent but various documents indicate the university might have invested birr 100,000, mostly for purchase of cattle which amount is hopefully recycled back. Inventory records of the project resources which should have been prepared regularly and maintained are not available.

Present appraisal of facilities indicate that the cattle shade, urine and faeces outlets, feeding lot and watering troughs may need improvements according to standard measures and design. As only part of the barn space is concretized, observation and technical assessment indicate that the loading is too large for fattening purpose. Measures are needed to utilize the available space efficiently. Enlarging the cattle farm might be one option to utilize the available barn and loafing space.

4.4 Organizational Structure

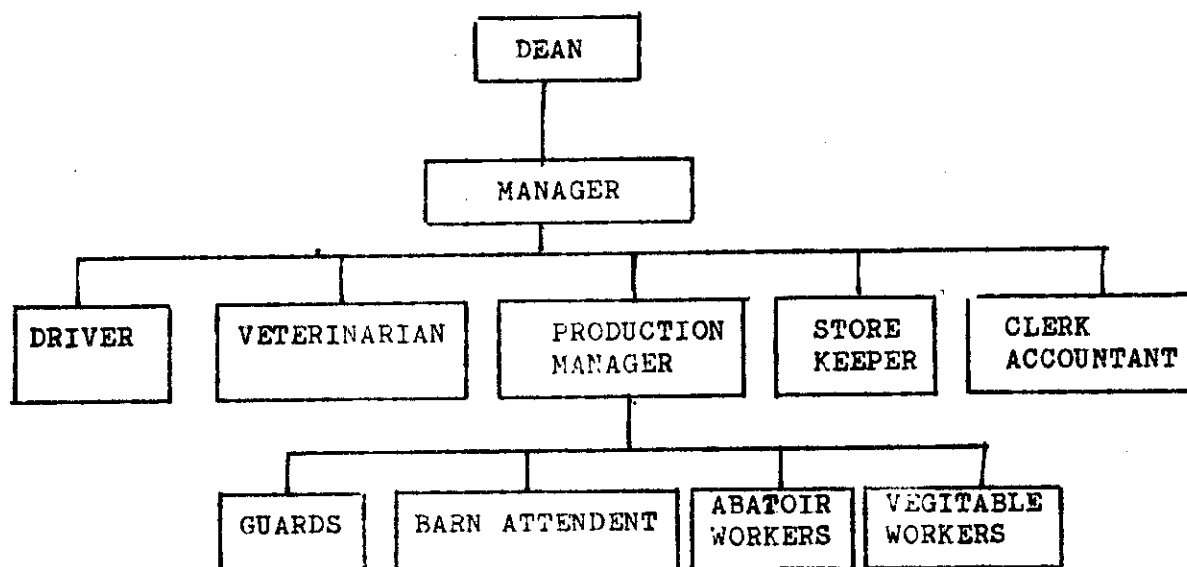
4.4.1 Organizational Structure

Still today the Office of Vice-President for administration and development and the project coordinating office of development projects of Addis Ababa University are the highest governing bodies in the organization structure of the project. The above bodies do involve themselves in the administration of the project to the extent of deciding selling price of beef, meat, and live animals, and wage rate of labour. Structurally, the Dean of the Veterinary Faculty is the immediate supervisor of the farm manager (figure 2). The administration unit (maintenance, typing etc.), Finance Office (settling credits with customers, following current financial position of the project, etc.), personnel office (employment of labour etc.), personnel office (employment of labour etc.), and accounting offices of the Veterinary Faculty, all render free services to the farm project in their respective professions and responsibilities. Definitely these services are not included in the cost of the project. The responsibilities of all these service givers are also not well defined and regulated so that the project will have easy access to efficient services. The project is at times treated as one of the departments of the faculty to facilitate easy access to the services. The project's veterinarian assigned from the faculty, however gets

extra remuneration for services he offers in his free time. In future some kind of such incentive will be inevitable for those that would be involved in rendering services to the project, if the project activities are to operate efficiently.

Table 2

Organization Structure Cattle Fattening
Project



.../

As it exists the organization structure may involve a long bureaucratic channels from the project manager up to the vice-president. This may inhibit quick managerial decisions and lengthen chains of command leading to inefficient project management.

4.4.2 Manpower of the Project

At present the project has 17 fulltime and one part-time employees as indicated in the table 3 below. This is in addition to whatever services are rendered by the FVM regular personnel through the faculty administrative offices.

Table 3
Manpower Structure of cattle Fattening Project
September 1991

Employees	Number
Project Manager	1
Production Manager	1
Clerk accountant	1
Veterinarian (part time)	1
Born attendants	5
Abattoir workers	2
Guards	5
Vegetable workers	2
Total	18

It has not been possible to evaluate whether this manpower is just enough, above or below requirements. Financial results of operations would seem to indicate that the above personnel have hardly been able to justify their salary from the revenues generated.

4.4.3. Production Manager

The production manager presently is responsible for purchase of livestock and feeds; and maintenance of feeds, materials and farm equipments in the store. The responsibilities of the production manager however should be limited primarily to production activities and providing of technical assistance, in the purchase of feed and livestock. Store keeping should have been delegated to another employee as shown in the box of the organizational structure (Figure 1). This would enable the production manager to concentrate on production activities. The production manager is allowed to have petty cash for purchase, which practice is envisaged for efficient of operations in acquisition of livestock. But control must be exercised to prevent abuses that may result from such practices.

4.4.4. Employment

Labour employment is done by the personnel office of the faculty. It has been difficult to see to what extent such practice is good or bad in efficient labour management. There may be need to delegate authority to the project manager to recruit and employ the appropriate type and quantity of daily labour at the right time. It is reported that the project is facing labour shortage because the project is not offering a competitive wage as is offered by neighbouring livestock enterprise like ILCA and Evangelical Development Organization. To this extent it may be necessary to give the project more autonomy in decision making such as wage determination, employment, and recruitment at least for daily labourers.

4.4.5. Livestock and Feed Purchasing

At the beginning animals were selected and weighed by the selling state enterprise and trekked to the fattening project. Any accident or death of animals on the road were said to be borne by the selling enterprise. All transactions were settled through communication media with the head office of the corporation. Recently (after June, 1991), it is the production manager that goes down to Yabello or Alemtena enterprise or open private market at Nazreth (Arsi) in order to evaluate, select and weigh the animals to be purchased. The tedding is then done by the selling organization, but in this case the risks involved on the road are borne by the project itself. The project manager believes that additional costs for per diem and travel were worth incurring for the benefits of selecting and weighing appropriate animals.

As cattle purchases from government enterprises is not assured the project is forced to buy from open market to meet demands (especially for meeting cafeteria demands). For such purchases it has established a purchasing committee consisting of four members from the project including the production manager. This of course has its complications as decisions become bureaucratic and the project is frequently exposed to erratic demands and high purchase prices. The project also faces problems with a host of clientele, purchasers, brokers, cattle drivers, and competition with farmers themselves who in certain periods are themselves purchasers. Planning for advance purchase seems inevitable but will also increase investment costs.

It is reported that the project purchases on average about 120 animals per month, about two-thirds of which are shaded for student cafeterias and the rest are used for fattening purpose.

Purchase of feeds such as molasses, cotton seed cake, other concentrates, and grass hay is also done monthly. The production manager of the project purchases these supplies from government except the grass hay which is purchased from private sellers. There seems to be no problem in this regard. But whether the production manager should be involved in all these purchases, or a full-time purchases for purchase of the inputs is something worth considering seriously in future.

4.4.6 Accounting

The sales and physical records of the project are handled by the clerk accountant of the project, but it is the finance office of the FVM which assists in keeping the accounts of the project and finally keeps track of the financial position of the project.

As it is, the accounting system of the project is not well organized, but what type of accounting should be established for proper accountability of activities of the project is another matter, as various factors have to be considered. For example should accounting records be centralised at the FVM as they are now, or decentralised at the Farm is something not to be determined in haste. However the quality and quantity of manpower status of the project could be improved as the project expands its scope.

It is indicated that regular financial statements are not prepared and collections on sales are not made on time. For example reports show the University cafeterias and staff lounges do not settle their beef credit purchases on time as agreed. This results in shortage of cash to run the project smoothly. To what extent is this delay in payment of purchases due to the University's claim on its unpaid investment in the project is unknown.

4.5 Marketing of Livestock Shaded or Fattened

It is evident to note that the supply of meat to the cafeteria is assured at lower than full cost of the farm project. It will not be a surprise therefore if the farm is operating at a loss. To begin with all the project costs are not fully costed as many overhead

administrative costs are borne by the Faculty (FVM). Secondly, sales price has been established to be at 50% below the market. This by itself definitely is internal revenue generation for self-financing, as the University is saving in cost of feeding students.

There is however something that must be noted here. To meet student cafeteria demands, irregular purchases and untimely sales are made, as when animals are sold before fattening process is finished (90-100 days) which subjects the project to either extreme high market price or poor quality of product. At other times such as during summer time (kremt) student cafeteria demands are low, and already fattened animals have to be sold to other clients perhaps at even lesser price.

4.6 Financial Performance and Management

When the cattle fattening project started Dr. Jewaro Abdu, academic staff member of FVM was assigned to manage the Cattle Fattening Project but was transferred to his teaching post after a short while. Later on Dr. Belete Makuria, staff member of FVM was assigned to serve as manager of the Project in place of Dr. Jewaro.

After. Dr. Belete Makuria became in charge of the Cattle Fattening activities the project generated a net income of Birr 69, 117.86 from December 1, 1986 - June 30, 1989. (Refer to the attached income statement as at June 30, 1989). In addition as per the attached statement of Financial Position, the Cattle Fattening Project had a net current asset of Birr 28,655 as at June 30, 1989. (Refer to the Appendix 2 and half year report).

Starting April 1, 1989 up to now Ato Dagnachew Bisrat was appointed Managing Director of the Cattle Fattening Project. Ato Dagnachew Bisrat was a graduate from Ambo agricultural Junior college and has been working in the area of agricultural production for a long time and is said to have a wealth of experience in his profession. It is reported that he has contributed a lot in the re-organization of the cattle shading and cattle fattening project in spite of the many problems faced by the project.

A look at two and half years financial statements of 86/89 (see appendix I) reveals total sales of Birr 1.36 million, which is approximately Birr 544,000 per year or 45,000 per month. When this is compared to the most

recent years revenues of 90/91 (see appendix II), there seems to have occurred no improvement at all. The revenues generated seem to have stayed in the same neighbourhood.

On the other hand in 86/89 the expenditures ranged up to Birr 1,29 million or 516,000 per year, or 43,000 per month. compared to the monthly expenditures of 90/91, there seems to be quite an increase in expenditures which is not surprising considering that there has been no marked change in selling prices of the Project's products, while it suffered increases in the its cost of production.

Another fact to note in the 86/89 income statement is that 87% of the sales comes from sales on credit and not on cash sales. If this sales on credit is not collected timely, it is evident to see the liquidity problem the project will have. This is quite vividly portrayed also in the statement of the financial position of the project where 50% o the current assets are represented by "receivables". Again if their collectibility is not assured, the project will have an acute working capital problem.

The cost structure of the 86/89 statement shows that 87% of revenues went to cost of sales or cost of production. Out of the 23% of the gross profit almost 95% was taken by salaries, supplies and utilities, leaving 5% as not profit margin. But this was not possible at all by 90/91 where the monthly deficits were a constant phenomena (see appendix II).

The projects financial position also portrays heavy indebtedness to the University, as well as to the Faculty. For all practical purposes the Project is going on only by credits and loans from the faculty and the university. As a financial undertaking it is thus hard to say it has bee a successful undertaking so far.

Conclusions

AAU involvement in revenue generating activities portrays a very significant experience in undertaking income generating projects in conjunction with educational objectives or providing of ancillary services. The AAU has been involved in operating farms directed to production of agricultural products, such as crops, vegetables meat (cattle and chicken), eggs and milk.

Definitely the University community, especially, students (through their cafeteria) and to a limited extent staff have been beneficiaries of such activities. The University would not have been able to feed students at Birr 30 per month per student, which the government allocates as student food budget, if it was not through the produces of these activities. Those that ate in the proximity of these activities are much more the primary beneficiaries than the ones placed further.

These farms have also been causes for much better financial operations not only of student cafeteria, but also of staff lounges and restaurants, and student lounges, which the university also runs. These lounges are operating successfully (profitably) because they have been able to obtain farm products at low cost from the farm project undertakings.

In this sense it could not be said that the involvement of the university in internal resource mobilisation activities have been totally futile or without benefit. But when we examine the financial operations of each undertaking we see many problems and not very satisfactory financial results.

The causes for unsuccessful financial results could be summarised as follows:

1. Difficulties in reconciling educational objectives and financial objectives. At times each is used as an excuse for not accomplishing the other.
2. To begin with there seems to be an overriding belief and purpose in a viable financial proposition to enter into and undertake a project, but soon it is camouflaged under social objective in order to secure higher authorities acceptance of the project, or in order to avoid being subjugated to commercial rules and regulations, or escape constraining government rules.
3. At times projects may even find it suitable to declare loss deliberately even when making profits, or understate income generated, or report no income at all in order to avoid government budgetary control, i.e. either to avoid passing their surplus to the central authority (treasury or administration), or for fear of having their budget reduced (adjusted) accordingly.
4. Failure to appropriate cost activities. Costs that could have been incurred by or charged to these activities are borne by the faculty or the central university administration i.e transport, purchases, accounting etc.

5. Inability to charge appropriate sales price commensurate with costs.
6. Lack of management stability and continuity caused by frequent management changes or turnover. In case of Debrezeit we have had 7 managers in 10 years, each with no more than 1 year to maximum of 18 months. This is in addition to period of no management leadership at all.
7. Too long a gap and lull period of indecision in between management change. This exposes the project to a lot of misappropriation and misuse of products.
8. Long and involved chain of command as these farms still have to report to central university administration in addition to many other intermediary levels of authority, which hinders autonomous day to day operation of the undertaking. This also entails complicated organisational structure.
9. Lack of appropriate financial control mechanism for inputs and products (inventory control), purchases, sales, and cash; accompanied by poor or inadequate manpower skill, and absence of poor accounting records.
10. Poor financial reporting system. Financial reports are produced only sporadically, not regularly. Management see to make decisions without information or management information data.
11. Involved and complex government, university, faculty, labour, student, and staff relations.

Appendix I

Addis Ababa University
D.Z. Veterinary Medicine Faculty
Fattening Project
Income Statement
For the Period Tahisas 1979 to Sene 30, 1982 E.C.
(1986-1989 G.C.)

Revenues

Sales on Cash		173322.48
Credit Sales		<u>1187685.45</u>
Total Revenue		1361007.93

Cost of Sales

Purchase	1198904.13	
Ending Cost	<u>63285.30</u>	<u>1135618.83</u>
Gross Profit		225389.10

Expenditures

Salary	50230.86	
Supplies	947.96	
Animal Feed Cost		
Purchase	87469.52	
Ending	<u>25345.47</u>	62124.05
Animal Medicine Cost		
Purchase	8545.92	
Ending	<u>807.72</u>	7738.20
Travel and other Exp.		7311.28
Utility and Telephone		7981.76
Vehicles Maintanance & Fuel		
Consumption		9661.15
Miscellaneous Exp.	<u>10275.98</u>	
Total Expenditure		<u>156271.24</u>
Net Income		<u>69117.86</u>

Addis Ababa University
D.Z. Faculty of Veterinary Medicine
Fattening Project
Notes To The Account
For the Year 1982 E.C.
(1980 G.C.)

<u>Note</u>	<u>Particular</u>	<u>Amount</u>
1	<u>Cash</u>	
	Sene 30, 1982 E.C. General Ledger Balance	(60040.48)
	<u>Add</u>	
	- Loan from AAU not credited to the Project Account	100000.00
	- Payable to the Faculty (Charged to the Project Account but not paid)	206793.53
	- Accrued Payable	<u>58900.40</u>
	Total	365693.93
	<u>Less:</u> Outstanding Receivable	
	- AAU Butchery	192447.08
	- AAU Research	2239.90
	- FVM Staff Lounge	529.21
	- FVM Dean of Student	<u>2789.00</u>
		<u>198014.19</u>
	Cash Balance Sene 30, 1982 E.C.	<u>107679.74</u>
		<u>107639.26</u>
2	<u>Receivable</u>	
	- Reffer Note 1 for out-standing Receivable	<u>198014.19</u>
3	<u>Payable to the Faculty</u>	
	- Our Adj. No. 53/79	101684.84
	- Our Adj. No. 52/80	102521.98
	- Our Adj. No. 34/82	<u>2586.70</u>
	Total	<u>206793.52</u>
4	<u>Miscellaneous Payable</u>	
	- Accrued Payable for Utility & Telephone	151.71
	- Accrued Payable for others	590.31
	- Accrued Payable for Stationary, Cleaning & Transport Charge	<u>6927.20</u>
	Total	<u>7269.22</u>

Addis Ababa University
D.Z. Faculty of Veterinary Medicine
Fattening Project
Statement of Financial Position
Sene 30, 1982 E.C.
(1989 G.C.)

<u>Current Assets</u>	<u>Note</u>		
Cash	1		107639.26
Receivables	2		198014.19
Inventory-Cost of Oxen			63285.30
-Cost of Medicine & Feeding			<u>26153.19</u>
Total Current Assets			395091.94
<u>Liabilities</u>			
Payable to Faculty	3	206793.52	
Payable to Livestock Development & Marketing Enterprise		51973.20	
Payable to AAU		100000.00	
Miscellaneous Payable	4	<u>7669.22</u>	
Total Liability			<u>366435.94</u>
Net Current Assets			<u>28655.00</u>

Appendix II
Faculty of Veterinary Medicine-Debrezeit
Revenues & Expenses of the Cattle Shading and Fattening Project
(May 1, 1990 - August 31, 1991)

PERIOD	REVENUE (Birr)	EXPENSES (Birr)	PROFIT OR LOSS (Birr)
May 1990	60,064.10	51,171.15	8,892.95
June 1990	49,519.70	48,652.84	866.86
July 1990	40,785.30	40,443.97	341.33
Aug. 1990	34,075.30	42,823.30	(8,748.00)
Sept. 1990	45,532.05	31,646.79	13,885.26
Oct. 1990	67,385.75	77,135.64	(9,799.89)
Nov. 1990	47,542.29	35,441.43	12,100.86
Dec. 1990	69,103.15	70,384.04	(2,380.89)
Jan. 1991	48,553.20	53,699.26	(5,146.06)
Feb. 1991	40,027.30	51,395.71	(11,368.41)
Mar. 1991	60,165.00	66,765.39	(6,600.39)
April 1991	32,349.80	34,700.69	(2,350.89)
May 1991	23,337.60	27,942.47	(4,604.87)
June 1991	24,248.09	25,923.67	(1,775.58)
July 1991	37,923.56	46,893.87	(8,970.31)
Aug. 1991	67,401.40	67,324.11	77.29
TOTAL	747,913.59	772,344.33	(24,430.74)
AVERAGE	46,744.56	48,271.50	

Appendix III
Debre Zeit Poultry Farm and
Cattle Fattening Project Managers

No.	Managers	Period
1.	Desalegne Kabtihyemer	6 months
2.	Abebe Hailu	18 months
3.	Solomon Teshome	Not known
4.	Abebe Hailu	1 year
5.	Dr. Jeware Abdu	6 months
6.	Dr. Belete Mekonnen	approximately 2 years
7.	Dagnachew Bisrat	2 and 1/2 year up to now