

want to reveal these information. Both areas have the trend in common that the smaller the farms are, the more likely farmers have to seek for additional sources of income. A similar trend can be seen for the use of credits but with the difference that farmers of Area B have better access to money.

In both areas credits are available from formal and informal sources. The formal credits are provided either by programmes of development aid or through Somali banks. The informal credits are provided within kinship networks, by friends, neighbours and traders.

Formal credits: The most important, donor supported, formal credit scheme is supported by funds and personnel of the United Nations Capital Development Fund (UNCDF) and is operated by the Commercial and Savings Bank of Somalia (CSBS) assisted by AFMET extension agents. This programme provides credits for seasonal inputs and land preparation. Presently this credit scheme is operated only in Project Area B in the villages of Aw Dheeglo, Daarasalaam and Mubaarak. To obtain this support, the participants are subdivided in groups of approximately 50 farmers who elect one headman in charge of the formal procedure. These headmen choose one of them to maintain the contact to the institutions.

The current interest rate applied in this programme is 18 % and the credit is to be paid back after one season. The recovery performance is currently running at over 90%.

Informal credits: Informal credits are widespread in both project areas. They are frequently used by small-scale farmers before the harvest period to buy food and before the period of land preparation to pay services and inputs. The money is usually borrowed from shopkeepers and traders who in most cases ask repayment after the harvest in terms of farm products valued according to negotiations. The equivalent is mostly valued below the market price.

In Project Area A creditors also use the mahruun credit system, originally introduced by Arab traders:

The debtor who receives a loan has to pawn farm land to the creditor. The amount asked for security is a matter of negotiation but the creditor usually ask one dharab for 10,000 to 20,000 So.Sh. He uses this land for his own purposes until the loan is paid back (Originally the debtor could continue to use his land). The period of repayment is a matter of negotiation, commonly including the farmers will loose his land if he cannot pay back in time (modification practised in Cabdi Cali and Maanyo Faarax). In most other villages this system is not accepted since it is regarded to be against Islamic law and too unfavourable for the farmers.

In both project areas there are considerable differences concerning the investment in agricultural production. The information provided by the interviewees proved to be unsuitable for listing in a table. Generally the majority of farmers do not know the amount of money they use for investment purposes. In most cases they are only aware of the most recent expenditure or the costs arising regularly, such as costs for tractor services.

5. FEMALE FARMERS

The female farmers of both project areas have to be regarded as essential for the local economy. A large part of the development of the villages depends on them as they are fully integrated into the economy and the agricultural production. Their contributions consist of:

- working in agricultural production;
- managing the livestock kept in the village;
- producing handicrafts;
- trading;
- providing the family with water and firewood;
- being mother and housewife and
- household activities.

In most villages women also have land either inherited from their parents or from their husbands or received as a gift. It is common that women whose husbands own more than 1 ha but below 10 ha are given a farm plot (boombo) at their disposition.

Generally women regard themselves also responsible for the family farm as they work on it. They take part in decisions concerning production. They manage the work of hired labour and they are in charge of the production once it is in the compound (e.g. storage, food consumption, retail trade to meet family needs).

Women are responsible for animals kept in the compound except for buying and selling them if they belong to their husbands. But if female farmers possess their own livestock, on average they have 10 to 12 chickens, 5 to 10 head of cattle or both. The gains from her own animals are at the woman's disposition.

5.1 Female Economy

A considerable number of women work on land which is at their disposition. According to Islamic law women inherit half the share of men but only a minority takes advantage of this regulation in case they received agricultural land. It is common practice that they prefer to accept a compensation from their brothers according to the actual value of the land inherited in order to keep this agricultural land within their original family.

Therefore only a minority of female farmers own land, but many women have access to land provided for them by their husbands (boombo). The women alone are responsible for the production on this land and they decide about the cropping pattern and the use of the gains, which are at their disposal.

Analysis of the results shows differences in both project areas concerning land belonging to women and the use of the income.

Table 35: Agricultural Land of Female Farmers

Criteria	Area A	Area B
Women with boombo	30 %	67 %
Women without boombo	70 %	33 %
Average size	1,17 ha	0,93 ha
(Mean Variation)	1,04 ha	0,64 ha)

Source: ZELF Team 1989

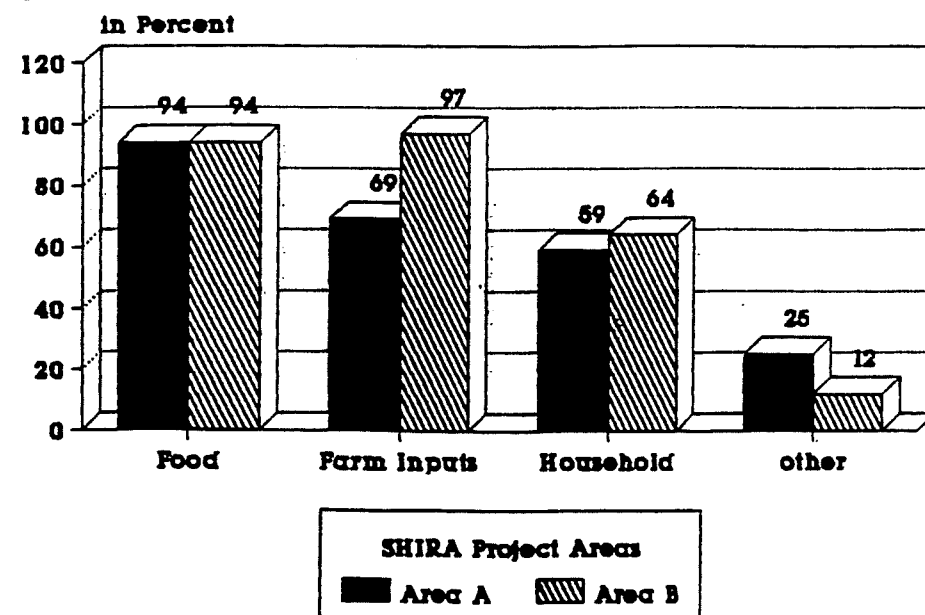
The profits obtained from the boombo are most likely used to support her respective family and it is frequently up to the woman alone to provide the daily needs of her family. Since most women (50 % in Area A; 79 % in Area B) have their own income, their contribution to meet the family needs cannot be underestimated.

Even though the individual contributions to the family income and the share of expenditure for the family is regulated by customary law, women tend to use their income to benefit their family and household.

5.1.1 Use of Income

The female farmers use their income for feeding their families, to meet their and their children's' needs and to buy farm inputs. If possible they save for future expenditures by buying gold (e.g. for the purpose of building or repairing a house, to support the children and for periods with insufficient income).

Figure 10: Likelihood of Use of Income

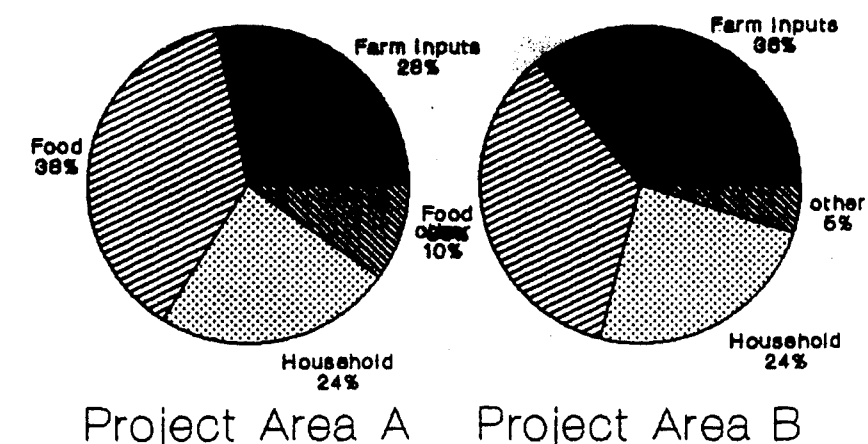


Source: ZELF Team 1989

Figure 10 shows that there is a correlation between the availability of a boombo and the likelihood of using the woman's own income for farm inputs. Furthermore it indicates that the female farmers in both

project areas contribute considerably to their family's subsistence if they have their own income.

Figure 11: Distribution of Expenditure



In percent

Figure 11 reveals how female farmers distribute their income. As mentioned above, the individual contributions to meet the family's needs are regulated by customary law. But women contribute more than they have to. In Project Area A 44 % and in Project Area B 64 % of the women add money or kind to the family budget which is usually covered by the husband.

5.1.2 Contribution to the Family Budget

Besides managing the household women work on the fields of the family. In farm families with less than approx. 3 ha women also work as hired labour on other farms and earn money by producing handicrafts, trading on markets of the region, collecting firewood for sale and transporting goods.

If a man has one wife only she contributes her whole income to the family budget and she may cooperate economically with her husband. But if a man is married to more than one wife his land is subdivided. Each wife works on a share sufficient for her and her children's' needs and the man keeps a share for himself. The profits they receive from the land they work on and the wives' additional income are only used for "her" family. Moreover the husband has to provide the daily food of his families (if married to more than one wife) and has to pay for the needs of the respective family members (according to traditional regulations which are recoverable by the woman).

Table 36: Contribution to the Family Budget

Contribution	Area A	Area B
Women contributing:		
- having a boombo	68 %	74 %
- without boombo	32 %	26 %
Contribution in:		
Kind	50 %	28 %
Money	50 %	72 %
Both	29 %	12 %
Average daily money contribution:	293 So.Sh.	240 So.Sh.
(Mean variation	159 So.Sh.	135 So.Sh.)

Source: ZELF Team 1989

Table 36 shows the structure of contribution provided by those women who help to cover the family budget.

Besides being engaged in agriculture women are involved in local trading of agricultural products and firewood or marketing their own crops for the daily needs of their families.

6. FARMING POPULATION AND DEVELOPMENT - AN ASSESSMENT OF SELECTED BEHAVIOURAL CHARACTERISTICS

Agricultural production is the sector of the Somali economy where innovations are most readily adopted. Their introduction depends on decisions within the framework of the individual strategy of risk aversion. Therefore farmers consider various aspects of their socioeconomic environment in order to obtain criteria for the decision making process:

a) The size of their respective cultivated area. The findings of the study reveal that farmers estimate 3 ha to be the poverty line for the subsistence of an average family. Below this size of farm land the strategy of risk aversion is dominant and the farmers organize their production to secure the basic needs. Moreover they hardly have sufficient means or adequate labour capacity to buy external inputs or to perform new labour-intensive practices of cultivation.

b) The access to inputs. The availability of inputs is uncertain for most farmers and the prices can vary considerably. Therefore all innovations which require additional inputs are judged carefully.

c) Lack of knowledge. Although farmers are very interested in increasing their agricultural output they prefer to use those forms of production which have proved successful for generations. The findings of the study show that the major reason is the lack of knowledge of improved techniques of agricultural production.

d) Expectation of benefit. The innovations are expected to show benefit within at least one or two seasons. The farmers plan ahead only for a period they can assess, since their production is affected by various uncertain influences (such as availability of water, disease, fluctuation of prices, fund raising, siphoning-off of surplus by externals etc.).

Considering these major criteria, mentioned by farmers, there are three main groups among the agricultural producers:

- Small-scale farmers. Economically they are hardly able to use innovations without endangering the basic needs of their family. Moreover they do not have enough knowledge to judge the risks of adoption. The majority tends to use the persisting traditional way of production, since it requires inputs which are already available.

- Demonstration farmers. These farmers have, among others, have been selected by AFMET because of their readiness to undergo risks, their reputation as agricultural producers and their ability to handle new practices of production. This group represents a minority which is more likely to be open for adopting innovations.

- Large-scale farmers. They have the resources required to take the risk of adopting innovations. Furthermore they generally have better access to inputs. Their agricultural production is market-oriented and therefore their willingness to adopt innovations is guided by the effects on the farmgate prices for the respective products.