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Support to Smallholder
Irrigated and Rainfed Agriculture
(SHIRA)
Lower Shabeelle Region
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SOCIOECONOMIC STUDY
OF THE SHIRA - PROJECT AREAS
IN LOWER SHABEELLE / SOUTHERN SOMALIA
- FINAL REPORT -
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LG 1044

Prepared by

Dipl.-Geogr. Norbert Seger

Dr. Jörg Janzen



FU BERLIN FB Geowissenschaften

Zentrum für Entwicklungsländer-Forschung
Centre for Development Studies
Centre d' Etudes de Développement

مركز الأبحاث للبلدان النامية

FOREWORD

This socioeconomic study is the product of a research project commissioned by the GTZ and conducted by ZELF (Zentrum für Entwicklungsländer-Forschung, Centre for Development Studies, Faculty of Earth Sciences, Free University of Berlin). The study was carried out from March to December 1989. Six months were spent on preparation and fieldwork, followed by four months evaluating the results and writing the report.

The project was supervised by Dr Jörg Janzen. Diplom-Geograph Norbert Seger organized the fieldwork and the interviews in the project area and evaluated the data on his return to Berlin.

Without the active support of many people it would have been impossible to carry out the - sometimes difficult - fieldwork. Special thanks are due to our three Somali colleagues, Moxamed Aden Keynan, Cabdikadir Sheikh Cabdullahi and Omar Hersi Xassan, who acted as translators, interviewers and enumerators. Thanks are due to Mr Christian Schneeweiß, a geography student and GTZ intern, who, from May to September, helped the ZELF Team to collect data on land use and infrastructure. Another GTZ intern, Mr Thomas Villinger, kindly made a draft land-use map of Project Area B available to us.

We also wish to express our thanks to Mr Swoboda and his Somali colleagues at the Ministry of Agriculture, Mr Moxamed Hassan Badiyow and Mr Abdukadir Moxamed Omar, for drawing up the crop budgets for the socioeconomic study. Many thanks are due to the SHIRA Project team, Mr and Mrs Sennema and Mrs Gebauer, for their advice, support and valuable information and to the SHIRA Project leader, Mr D. Gebauer, without whose support - providing a vehicle and working space at the Project Office - the study would not have been possible.

As far as the content of the study is concerned, the authors would have liked to treat some aspects in greater depth. However, for reasons known to the GTZ (various illnesses; the fact that Dr. Janzen was not allowed to perform the planned field work in July/August 1989; the difficult political situation in Somalia etc.), this was not always possible.

However, we hope that, in spite of its shortcomings, this study will provide a basis for future decision-making and contribute to a wider understanding of the complex socioeco- nomic conditions in the SHIRA Project Areas.

Jörg Janzen
Berlin, May 1990

Fig. 1 : Location of the project areas

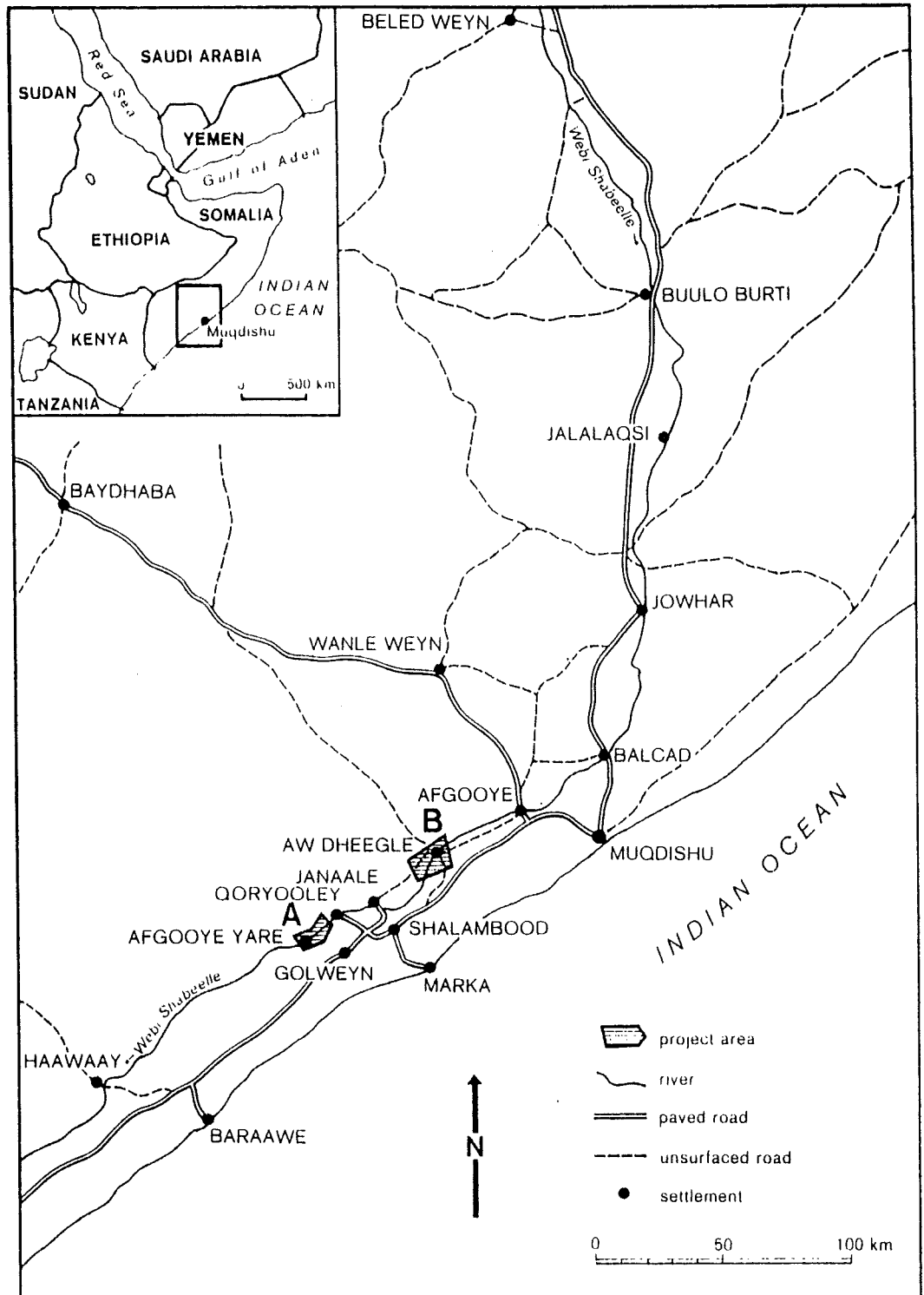


TABLE OF CONTENTS

	Page
Foreword	i
Table of Contents	iii
List of Tables	iv
List of Figures	v
Annexes	vi
Abbreviations	vii
Spelling of Place Names	
SUMMARY AND MAIN RECOMMENDATIONS	1
1. THE BACKGROUND OF THE STUDY	10
2. METHODOICAL APPROACH	11
3. POPULATION IN THE AREA OF THE SHIRA-PROJECT	13
3.1 Demographic Pattern	13
3.1.1 Spatial Distribution	13
3.1.2 Age and Gender Structure	15
3.1.3 Migration	16
3.1.4 Ethnic Differentiation	18
3.1.5 Family Structure	20
3.2 Pattern of Social and Economic Stratification and Organization	20
3.2.1 The Family Level	20
3.2.2 The Village Community Level	23
3.2.2.1 Administration and Power Structure	23
3.2.2.2 Forms of Socio-Economic Cooperation	27
3.2.2.3 Relationships outside the Village Community	30
3.3 Glimpses on the Living Conditions	32
3.3.1 Family Income	32
3.3.2 Nutrition and Water for Household Purposes	32
3.3.3 Energy Needs and Supply	34
3.3.4 Health Care	35
3.3.5 Education	36
3.3.6 Transport and Communication	37
3.4 Access to Land and Irrigation Water - Crucial Factors in the Local Setting	39
3.4.1 Rights over Land and Land Tenure	39
3.4.1.1 Traditional Land Tenure Arrangements	39
3.4.1.2 Land Registration and its Implications	40
3.4.1.3 Actual Land Tenure Pattern	42

3.4.2 Water Rights and Water Management	45
3.4.2.1 Construction and Maintenance of Irrigation Structures	45
3.4.2.2 Distribution of Irrigation Water	46
4. IRRIGATION AGRICULTURE - MAINSTAY OF THE LOCAL ECONOMY	48
4.1 Some General Comments on the Agriculture in the Project Area	48
4.2 Local Farm Types - An Approximation	51
4.3 Plant Production Characteristics	56
4.3.1 Type of Crops and Cropping Pattern	56
4.3.2 Labour, Time and Input Requirement	60
4.3.3 Yields	66
4.4 The Livestock Sector	69
4.4.1 Some Comments on Livestock Keeping and Production	69
4.4.2 The State of Animal Traction	71
4.5 Storage, Marketing and Transportation	73
4.6 Income Generation and Credit	77
5. FEMALE FARMERS	79
5.1 Female Economy	79
5.1.1 Use of Income	80
5.1.2 Contribution to the Family Budget	81
6. FARMING POPULATION AND DEVELOPMENT - AN ASSESSMENT OF SELECTED BEHAVIOURAL CHARACTERISTICS	83
6.1 Acceptance of Innovations	84
6.2 Role of Planning in the Local Context	86
7. SOCIAL ENVIRONMENT AND PROJECT ACTIVITIES - CONCLUSIONS AND RECOMMENDATIONS	89

LIST OF TABLES

	Page
Table 1: Sedentary Population in the Project Areas A and B.....	13
Table 2: Income of Emigrants Abroad (p.a.).....	16
Table 3: Employment of Emigrants.....	17
Table 4: Family Labour Force.....	21
Table 5: Division of Labour.....	22
Table 6: Land Registration (1988).....	41
Table 7: Farm Size (ha) Distribution (%).....	43
Table 8: Prices of Farm Land (1989) per hectare.....	44
Table 9: Types of Farms.....	53
Table 10: General Data of Area A.....	54
Table 11: General Data of Area B.....	54
Table 12: Land Use in Area A (in percent).....	58
Table 13: Land Use in Area B (in percent).....	59
Table 14: Agricultural Activities by Crop and Month.....	61
Table 15: Time Requirements (Project Area A).....	62
Table 16: Machinery and Labour Costs (Project Area A).....	63
Table 17: Time Requirements (Project Area B).....	64
Table 18: Machinery and Labour Costs (Project Area B).....	65
Table 19: Price and Use of Inputs (1989).....	66
Table 20: Yields in Crop Production (1988 - 1989).....	67
Table 21: Yield of Different Crops (kg/ha) in Area A.....	67
Table 22: Yield of Different Crops (kg/ha) in Area B.....	68
Table 23: Composition of Livestock (% by head).....	70
Table 24: Likelihood in Ownership of Various Animals.....	70
Table 25: Average Nr. of Livestock Kept by Animal Keeping Households.....	71
Table 26: Prices of Livestock (August 1989).....	71
Table 27: Marketing and Storage of Staple Crops (Area A).....	73
Table 28: Marketing and Storage of Staple Crops (Area B).....	73
Table 29: Crop Prices (1988 - 1989).....	74
Table 30: Transportation Costs.....	75
Table 31: Transportation of Crops.....	75
Table 32: Taxes.....	76
Table 33: Income and Credit (Area A).....	77
Table 34: Income and Credit (Area B).....	77
Table 35: Agricultural Land of Female Farmers.....	80
Table 36: Contribution to the Family Budget.....	82
Table 37: Cropping Pattern on 50 ha (in ha).....	ANNEX 2
Table 38: Yield (kg/ha).....	ANNEX 2
Table 39: Cropping Pattern on 3 ha (in ha).....	ANNEX 2
Table 40: Yield (kg/ha).....	ANNEX 2

LIST OF FIGURES

	Page
Figure 1 : Location of the Project Areas	see
Figure 2 : SHIRA Project Area A. Land Use Pattern (Gu and Xagaa Season 1989) (incl. Supplement to Fig.2 : Infrastructure and Services / Project Area A)	Annex 11
Figure 3 : SHIRA Project Area B. Land Use / Infrastructure and Services	
Figure 4 : Population Structure (according to Age and Gender)...	15
Figure 5 : Spatial Segregation of Ethnic Groups in the Village of Mubaarak.....	19
Figure 6 : Model of Village Organization.....	26
Figure 7 : Farm Size Distribution in the SHIRA Project Areas...	43
Figure 8 : Land Use in Project Area A.....	58
Figure 9 : Land Use in Project Area B.....	59
Figure 10 : Likelihood of Use of Income	80
Figure 11 : Distribution of Expenditure.....	81
Figure 12 : Types of Tractor Owned in Project Area B.....	85

ANNEXES

ANNEX 1	Village Profiles
	I. Project Area A
	II. Project Area B
ANNEX 2	Case Studies
	I. The Village of Banaaney
	II. The Half-World Canal
	III. The Case of Daarasalaam
ANNEX 3	Glossary of Somali Terms
ANNEX 4	Local Measurements
ANNEX 5	Climatic Data
ANNEX 6	Crop Budgets
ANNEX 7	Questionnaire
ANNEX 8	Terms of Reference
ANNEX 9	Bibliography
ANNEX 10	Photos
ANNEX 11	Maps

ABBREVIATIONS

ADC	- Agricultural Development Cooperation
AFMET	- Agricultural Farm Management and Extension Training Project
BMZ	- Bundesministerium für Wirtschaftliche Zusammenarbeit
CARS	- Central Agricultural Research Station (Afgooye)
CSBS	- Commercial and Savings Bank Somalia
DILU	- Department for Irrigation and Land Use (at the Ministry of Agriculture)
EDF	- European Development Fund
FAO	- Food and Agricultural Organization
FEA	- Field Extension Agent (AFMET)
FEWSD	- Food Early Warning System Department
FYDP	- Five Year Development Plan
GTZ	- Deutsche Gesellschaft für Technische Zusammenarbeit GmbH
ITOP	- Fruit and Vegetable Canning Factory (Afgooye)
MOA	- Ministry of Agriculture
MLFR	- Ministry of Livestock, Forestry and Range
MNP	- Ministry of National Planning
MSP	- Middle Shabeelle Integrated Agricultural Project (Project of the GTZ)
NDSP	- National Development Strategy and Program
NFMAS	- National Farm Machinery and Agricultural Service (new name for ONAT)
NRDS	- National Rural Development Strategy
NTTCP	- National Tse-tse and Trypanosomiasis Control Project
ONAT	- Organizzazione Nazionale Altressi Trattore
SHIRA	- Support to Smallholders in Irrigated and Rain-fed Agriculture (Project of the GTZ)
So.Sh.	- Somali Shilling
TOR	- Terms of Reference
UNCDF	- United Nations Capital Development Fund
UNDP	- United Nations Development Programme
US AID	- U.S. Agency for International Development
ZELF	- Zentrum für Entwicklungsländer-Forschung (Centre for Development Studies) at the Free University of Berlin

SPELLING OF PLACE NAMES

Throughout the report Somali spellings have been used for place names with the exception of Mogadishu where the English spelling has been used. To avoid misunderstanding, a selected list of Somali and English spellings are given below.

Somali	English
Afgooye	Afgoi
Afgooye Yare	Afgoi Yare
Alafuutow	Alafuto
Aw Dheegle	-
Bombaasa Kulub	-
Banaaney	-
Caanoole	Anole
Cabdi Cali	Abdi Ali
Carmooy	Armoy
Daarasalaam	-
Doon Buraale	-
Far Xaano	Farhano
Farkeerow	Farkero
Furuqleey	Furuquley
Gorgaal	-
Janaale	Genale
Jawhar	Johar
Kurtunwarey	Kurtunware
Malayley	-
Malable	-
Mannyo Faarax	Maniafara
Marka	Merca
Muqdishu	Mogadishu
Mubaarak	-
Qoryooley	-
Shabeelle	Shebelli
Shalaamboot	Shalambot

SUMMARY AND MAIN RECOMMENDATIONS

SUMMARY

The Somali Government intends to raise the standard of living for the rural areas of the country, ultimately by developing local resources, mobilizing the productive capacity of the population, promoting self-reliance and by encouraging popular participation in development efforts. The German Agency for Technical Cooperation (GTZ) supports these efforts in the Lower Shabeelle Region with a project "Support to Smallholders in Irrigated and Rainfed Agriculture (SHIRA)".

The area of the SHIRA Project is situated along the lower reaches of the Shabeelle River, south west of Mogadishu. The project is located in two areas, namely the GORGAAL - AFGOOYE YARE REACH (Project Area A) and the MUBAARAK - AW DHEEGLE REACH (Project Area B). Neither of the project areas has been covered by other development projects, except AFMET activities. The project areas extend to estimated 8,000 ha (Project Area A) and 9,000 ha (Project Area B) with a population of 21,000 in Area A and 20,000 in Area B (MOA-DILU / GTZ 2/1989. p.1). Most of the villages are situated in the vicinity of the Shabeelle River, being the only¹⁾ source of water for agricultural purposes.

Socioeconomic Environment

The population of the SHIRA Project Areas is approximately 41,000 inhabitants with 51 % under 15 years of age. In the ZELF sample, each of the approximately 6,500 households has slightly more than six individuals, of whom 2.7 (Area A) to 3.5 (Area B) can be considered as the average family labour force.

The reorganization of the political and administrative structures after the revolution of 1969 and the formal abolishment of tribalism could not replace the former tribal structures. They still did not lose their importance for the population in both areas. The actual processes of decision-making and solving problems are broadly influenced by the persisting informal structures, which coexist with the formal political administrative system.

Formal education at the village level gains importance, although the majority of children do not attend school. Boys are more likely to finish all classes than girls, but both are needed to contribute to the family income. Formal vocational training is nonexistent at the village level.

1) Due to off-stream reservoirs, recently constructed along the course of the Shabeelle River, it is expected that perennial irrigation will be possible in future.

The conditions of health are poor in both areas. Waterborne diseases, such as malaria and bilharzia, are common and malnutrition is widespread among the population with low income. The Shabeelle River and the irrigation canals are the main source for drinking water, causing frequent gastroenteric diseases. Health facilities are virtually lacking in both areas and medical treatments are prescribed and dispensed by traditional healers and/or untrained pharmacists.

Agriculture and livestock keeping, at subsistence level, are the basic sources for living in the majority of the households. Crops are grown primarily for household consumption of approximately 70 to 85 % of households, which own less than 3 ha of land under cultivation. The surpluses are sold in the local markets to meet the needs, since the major household crops consist of maize, sesame, small amounts of vegetable or fruits. There are only few farmers oriented towards market production, although commercialization and monetarization gain increasing importance in both areas.

The farmers are predominantly private smallholders cultivating less than 3 ha of irrigated land, frequently situated along different canals. Each canal is operated by a Water User Association, responsible for its maintenance and the distribution of the water, which is considered as ubiquitous good, freely accessible to everyone. The membership in these canal based associations is compulsory for all farmers since it secures fair access to irrigation water for the members. The majority of households commonly require additional income and its members frequently work as labourers, mainly on other farm land. Along with a reform of the land legislation, introducing formal land registration, all agricultural land was nationalized in 1971. Nevertheless these small-scale farmers still have a considerable lack of land tenure security. Only a minority completed the land registration process successfully, which grants the lease of the cultivated area according to the Agricultural Land Law. Their land has frequently been occupied by others because the law permits registration of any unregistered land. An increasing number of absentee landlords, residing mainly in the urban centers, and a small number of local large-scale farmers occupies the uncleared bushland around the villages by registering this land with the intention of future use or for speculation purposes. This ongoing process stops the possibilities of expansion for small-scale farmers in the vicinity of the village and induces their migration to other sites.

Livestock keeping among small-scale farmers is primarily for household consumption, whereas large-scale farmers preferably keep herds for saving and selling purposes. Household livestock management is directed towards dairy products used for diversifying the diet and as a source of additional income. During the dry season of jilaal (December to March), numerous different nomadic groups of the interriversine area (Bay Region) migrate to these riverine region in order to obtain fodder and water for their livestock.

The agricultural activities of the majority of farmers is based on risk avoiding strategies. Their perspective of planning for future development hardly exceeds two seasons and the traditional ways of production are persistent. Farmers with 3 or more hectares are gradually increasing their market oriented production and only few farmers introduce innovations or use improved strategies to diversify their households' economic dependency.

In both areas the female farmers have to be considered as important members of the community, crucial for covering the basic needs of the farm families. They are fully integrated into the economy, the agricultural production and livestock keeping. Moreover they frequently have their own land and are generally as responsible for the family farm as their husband.

Based on the above-mentioned common characteristics both areas have a different history influencing their present development and different constraints to the agricultural production.

A. Project Area A

This project area can be considered to be a newly settled agricultural area. It used to be the traditional grazing area for the livestock of the Giddow tribe, a group which still has considerable influence on the present agricultural development of this area. This tribe is divided into two subgroups, the "Wajiis" who dominate the Qoryooley - Doon Buraale reach and who used to be the political representatives of the tribe and the "Safer" who dominate the Doon Buraale - Afgooye Yare reach and who used to provide the religious leaders of the tribe.

After the revolution in 1969 this traditional functional separation lost its importance in favour of the increasing influence of the "Wajiis" within the new governmental administration in the region. This tribal sub-group supported the official policy of reorganizing the settlement pattern by concentrating scattered small villages in new centralized sites along the river and they encouraged farmers from other regions to settle in their territory (e.g. Caanoole, Maanyo Faarax). The "Safer", being poorly represented in the new administration were opposing this policy, fearing that their grazing areas are being occupied by farmers from outside. Nevertheless they also founded new villages along the river (e.g. Afgooye Yare, Malayley) in order to keep influence on their territory and to secure their access to the watering places of their livestock.

At present these two groups of the leading tribe put the main emphasis on agricultural production whereas, their interests in future development differ. Both groups are agropastoralists but the "Wajiis" put the stress on crop production whereas the "Safer" prefer livestock keeping.

The population which immigrated in the past decades are mainly small-scale farmers, organized in tribal communities which have to cooperate with the leading group in their respective area on items concerning the regional economy and the development of agriculture.

Taking into account the different priorities of further development, the major problems mentioned by the target group can be summarized as follows:

- a) Insufficient availability of water for irrigation;
- b) Inadequate facilities for regulating the waterflow in the Half-World Canal or at the intakes on the riverbank;
- c) Insufficient availability of agricultural inputs (such as tractors, fuel, agrochemicals, credits, labour);
- d) Inadequate infrastructure for health;
- e) Lack of knowledge for improved and diversified agricultural production;
- f) Reduced availability of land for future extension of small-holders' farms due to land registration by local large-scale farmers and absentees;
- g) Lack of passable access to the agricultural area between the Shabeelle River and Farta Furuqleey and lack of passable track within this region;
- h) No confidence in governmental activities.

The village of Banaaney has to be regarded as an exception within Project Area A. Being a religious community with different economic structures and a different internal social organization the specific situation of the village varies considerably from the other settlements within Project Area A. Its agricultural production and overall development is closely guided and supervised by the headquarters of this religious community in Baydhabo (see ANNEX 2).

B. Project Area B

This project area can be considered as an old settlement area with a long tradition in agricultural production. The population has immigrated from various regions of Somalia²⁾. The agricultural economy is based on crop production whereas livestock is predominantly used for additional food supply and as an income reserve for periods of drought.

2) The process of immigration is still going on.

The reorganization of the Somali administration and the abolishment of tribalism after the revolution in 1969 changed the conditions for policy in favour of the centralized government but hardly affected the internal structures of the villages. The four major settlements of the area are communities with a persistent traditional tribal organization not allowing external groups to interfere in local affairs. Aw Dheegle is an exception because of the influence of Government and Party are much stronger than in the other three villages.

The formal and informal administration of each village is usually controlled by one leading tribe which dominates the village economy. They focus the efforts for development on their respective village regardless of the possible advantages of cooperating with other communities of the area.

Despite the differences of the development approach in each village the major problems mentioned by the target group can be summarized as follows:

- a) Insufficient and irregular availability of agricultural inputs (such as fuel, spare parts, pumps, credits, chemicals, labour)
- b) Inadequate facilities for regulating the waterflow of the Shabeelle River during high flood;
- c) Inadequate infrastructure for health;
- d) Reduced availability of land for future extension of small-holders' farms due to land registration;
- g) Lack of passable access to the agricultural area on the left bank of the Shabeelle River
- h) No confidence in governmental activities.

RECOMMENDATIONS

As a result of the socioeconomic study in the SHIRA Project Areas, carried out from March 1989 until August 1989, the Team of the Centre for Development Studies (ZELF) suggests some recommendations to strengthen and improve the ongoing and future SHIRA activities in the Lower Shabeelle region:

A. Measures to Increase Confidence

By regular as well as informal contacts with the village communities concerned, the SHIRA Project should explain, discuss and finally design its envisaged tasks/activities and thus encourage local influence on the Project's activities.

As the flow of information from the officials to the farmers is poor, it is common that the members of the target group are not sufficiently informed about planned activities and they

tend to regard the Project as a "source of money". Regular contacts with the farmers and their traditional leaders could establish trustful communication and improve the local contributions to the project's activities.

B. Better Incorporation of the Target Group in Project Activities

The members of the target group should be contacted and involved as directly as possible. The traditional administrative institutions of the villages should be included in local activities performed by the project.

The village communities should be encouraged to participate actively in the project activities, since this improves the supervision of the means used for development and allows the traditional leaders and the members of the target group to intervene if their interests are not respected.

C. Training of Farmers

Farmers, including female farmers, should be trained in irrigated agriculture and intensified keeping of small animals. These activities would contribute to the agricultural productivity of the farm families and should be carried out in close cooperation with other governmental organizations, above all with AFMET and ITOP.

This activity should be designed for small-scale farmers. As a result they could be encouraged to diversify their farm production and to increase their income by intensively cultivating also small farm plots for the local and external markets without putting a high risk on their subsistence.

The cultivation of vegetables could be a positive income-generating activity especially for female farmers with own land.

D. Land Registration

The small-scale farmers should be assisted in registering their farm land on an individual as well as on a group basis, the latter depending on feasibility considerations under the local/national conditions. The registration should be promoted through the existing Water User Associations (WUA) by encouraging them to register their area, including all members.

Land Registration should be the precondition for the rehabilitation of irrigation canals and for further development activities to reduce possible changes of land ownership to the disadvantage of the target group in the reach of the improved agricultural areas.

E. Improvement of Infrastructure and Transportation

The rehabilitation of the irrigation canal system should include improved allweather tracks and solid crossing points for better access to the farm land as well as better possibilities for the local and nomadic livestock to reach the watering places along the Shabeelle River.

In both project areas a study should prove the feasibility and possible locations of crossing facilities over the river.

In Jawhar the existing track to the gravel road should be improved to be passable during the whole year.

F. Energy Supply and Water Purification

The Wood Saving Stoves Programme launched by the SHIRA Project is appreciated by the majority of the interviewed households because of the lower consumption of wood, better taste of the meal since less smoke enters the pots, the material for stove construction can be found in the vicinity of the villages.

The use of solar energy should be regarded with caution, since this technique is presently completely unknown. Moreover, it appears that the adequate maintenance of the solar panel and the repair of defects could be uncertain factors, since there is little awareness about the permanent control required.

The pilot trial of promoting the moringa tree (*moringa oleifera*) for water purification purposes is interesting and worth being continued. But it should be taken into consideration that it would cause additional work for the women and that the advantages compared to adequate wells have yet to be tested. Furthermore, people would have to be willing to pay for water if this technique is organized on a centralized private basis.

G. Agricultural Inputs

Small-scale, private sector enterprises (e.g. local traders, workshops, new farmers' cooperatives) should be encouraged to provide requested inputs.

H. Animal Traction

The Project should support those already motivated farmers willing to introduce ox-ploughing.

A study should be carried out to analyze the feasibility of animal traction considering the problems of trypanosomiasis, veterinary services, adequate feeding of the animals and training (man and animal).

I. Production of Fodder

Therefore in both project areas a study should be carried out to analyze the possibilities to grow fodder as it could also have positive effects on diversifying crop production and generating additional income to farmers.

J. Female Farmers

Within the target group of smallholders female farmers should be a special target sub-group for agricultural training.

The training of the female farmers should include information about diversifying their agricultural production, since at present they have little knowledge in cultivating vegetable and fruit trees.

The project should encourage women's activities in income generating activities, by encouraging and supporting women's cooperation in animal husbandry, processing of agricultural products and marketing.

In all villages the access to input credits or loans should be improved as women most likely use them to secure the basic needs of their family.

The Project should support the construction of a local made multi-purpose house in the villages in order to provide women and men with a central meeting place where further development activities etc. can be planned or promoted.

K. Impact of Forms of Self-help and the Water User Associations (WUA) on Development

The traditional forms of self-help are practised among relatives or friends and are not expected to regain importance with increasing monetarization of agricultural production.

The WUA should be included in all activities concerning their respective canal. But despite the ZELF Team's fundamental reservations³⁾ against vesting the WUAs with responsibility for development activities, the possibility cannot be excluded that, in those villages still preserving traditional informal structures, a final decision on the use of the WUAs can only be made after adequate testing.

It is recommended to include members of the respective akhyaar in the process of institution building, since they can support the smallholders in forming groups and assist them in performing development activities by acting as mediators to the authorities.

3) These reservations are supported by the Regional Extension Officer of AFMET, responsible for the region during the performance of this study.

L. Further Studies

In both areas a study should analyze the feasibility of a drainage system to prevent inundations, using the natural depressions (Area B) and the feasibility of rehabilitating dhesheeq for agricultural production and/or for controlled grazing of livestock owned in the settlements (in cooperation with the herdsman).

A study could be carried out to analyze the possibilities to include the existing areas of depression in measures of flood relieve and drainage of irrigated areas.

1. THE BACKGROUND OF THE STUDY

The very inadequate and inexact data basis on the social and economic structures of the two project areas required a socio-economic analysis.

The main objective of the socioeconomic study can be summarized as follows:

The study aims to provide a detailed socioeconomic situation analysis in the target group in the SHIRA Project Areas A and B. Moreover, the socioeconomic study is regarded as an important contribution to the decision-making process for further planning and the realization of future development activities in the SHIRA Project.

"The Target Group includes all farmers organized in Water User Associations (WUAs)" (according to the SHIRA Project manager Mr D. Gebauer).

However, the ZELF Team has differentiated between three sub-groups, according to the main analysis of the method of ZOPP:

The Primary Target Group is defined as small-scale farmers (up to 3 ha) including their women to whom special attention is paid.

The Secondary Target Group consists of medium- and large-scale farmers, absentee landlords and nomads.

The Tertiary Target Group considers representatives of formal and informal institutions who have a considerable influence on the decision-making processes in the villages.

The majority of farmers in both project areas belong to the Primary Target Group. The study reveals that the other target groups cannot be excluded from project activities since their influence on all matters concerning the village communities, including the decision-making process, is considerable. Moreover, they can be regarded as groups which can more likely introduce innovations or support activities for development.

2. METHODOICAL APPROACH

The area of this socioeconomic study is identical with the area covered by the SHIRA Project. It consists of two regions situated in the Lower Shabeelle Region, in the AW DHEEGLE - MUBAARAK REACH and the GORGAAL - AFGOOYE YARE REACH.

The ZELF Team used aerial photography, maps, reports and official data to actualize the already existing knowledge about these areas.

The analysis of the available reports, statistics etc. concerning the SHIRA Project Area contained only insufficient baseline data. Therefore the main source of information had to be the questionnaire developed by the ZELF Team, and data provided by the local authorities, traditional leaders, members of the target group and informants concerned with the development of the region.

The data base for assessing the actual levels and structure of the project population is poor. The main source should have been the national population census of 1987 but its results have not yet been released. The ZELF Team therefore carried out its own population survey by gathering the population data collected in each village for the census of 1987 and the revised figures of 1989.

According to the Terms of Reference (TOR) the target group to be studied were those described in the target group identification. The instruments used to gather information were formal questionnaires, open interviews and discussions with the project staff and colleagues from various Ministries and development agencies. The relevant questions were developed, discussed and pretested in cooperation with the SHIRA Project and the target group. The final version (see Annex 7) was translated into the Somali language in order to improve the cooperation with the local staff. The formal interviews were carried out by Somali counterparts, who were introduced to the subject of the socioeconomic study and trained in performing empirical fieldwork.

Before the campaign began all villages and all relevant regional authorities were visited in order to inform them about the study and to present the ZELF Team. The units to be interviewed with the formal questionnaire were individual households, whereas the open interviews were carried out with relevant members of the respective villages, e.g. formal and informal village chiefs, village committees, religious leaders, opinion leaders and members of the target group. Since the ZELF Team consisting of male members could not have access to the female community, women-oriented interviews were carried out by local female interviewers, who had been trained and supervised by the ZELF Team, in cooperation with the Farm Family Section of the SHIRA Project. The individual households to be interviewed were chosen at random, since no detailed information about the village population was available. Their selection had to be differentiated because the settlement pattern is influenced by the tribal affiliation of the inhabitants who tend to segregate according to their social and tribal status.

To perform the study adequately, the members of the ZELF Team lived in the project areas and interviewed 385 households (5.9 % of all