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EXTENSIVE RURAL DEVELOPMENT

An Evaluation of the Zone I Programme in Guinea-Bissau

By Jan Olsson, Lars Smedman, Göran Widerström

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E X T E N S I V E R U R A L D E V E L O P M E N T

An Evaluation of the Zone-I Programme in Guinea-Bissau

by

Jan Olsson
Lars Smedman
Göran Widerström

This report is the result of a mid-term evaluation performed during two visits to Guinea-Bissau in May and September/October 1985.

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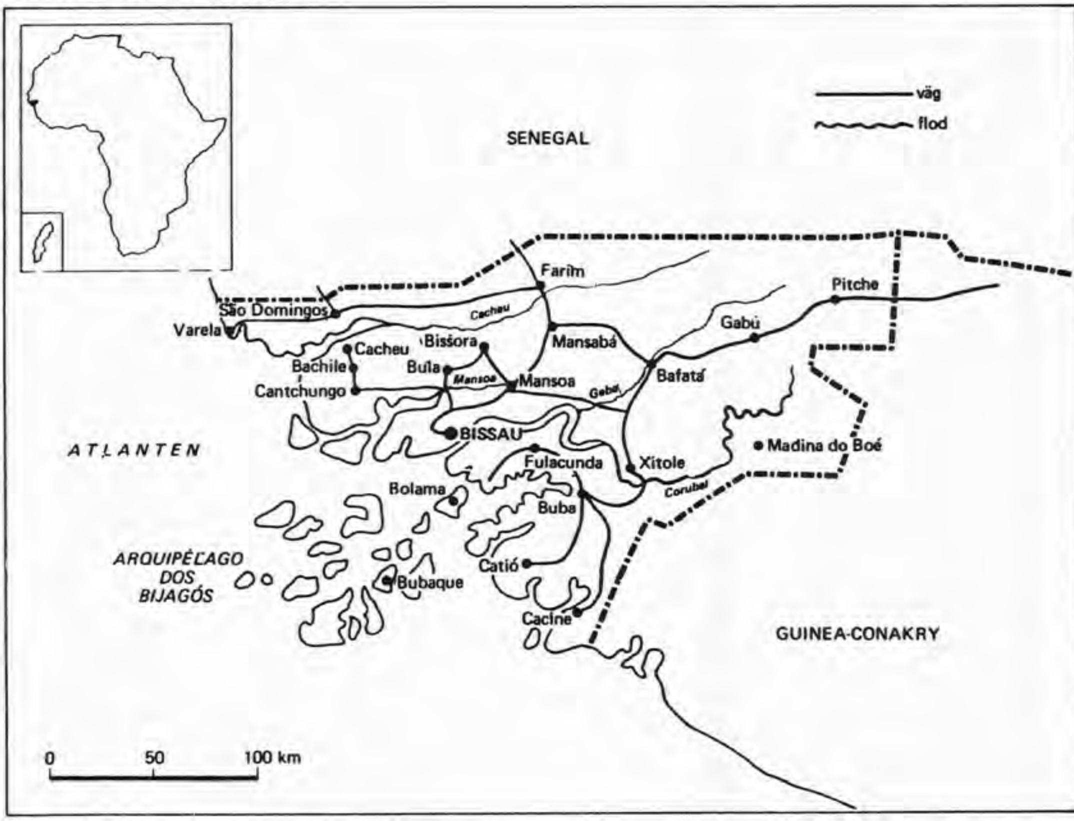
GUINEA BISSAU



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I INTRODUCTION

Background and composition of the team

The joint financing of the Zone-1 Programme by Sweden and Guinea Bissau started in 1981. In 1983 a prolongation of the Programme was decided for the period 1984-86. In the agreement it was established that a mid-term evaluation should be performed during 1985. The evaluation comprised two visits to Guinea-Bissau - one three-weeks period in May (end of the dry season) and one two-weeks period in September-October (end of the rainy season). A preliminary report was presented in July and this was thoroughly discussed during the second visit. The terms of references (in portuguese) are shown in annex 1. The evaluation team was composed of the following members:

Jan Olsson, Economist, Team Leader
Lars Smedman, Medical doctor
Göran Widerström, Agronomist

The team had a fourth position, a social anthropologist which unfortunately was not possible to fill. This does not only mean that socialanthropological views are missing in the report but the very important discussions within the team of all views, impressions and ideas suffered considerably from this absence. During the first visit representatives from the Ministry of Economic Coordination, Plan and International Cooperation (MECPIC) and from GAPLA - the planning office in the Ministry of Rural Development and Fishery - closely followed the evaluation and participated in most discussions and field visits. A separate report was presented by MECPIC.

Outline of the report

After this introduction the report proceeds with a summary of findings and an analysis of the future of the Programme. The rest of the report is divided into two parts.

The first part evaluates performance on the Programme level. A so-called effectiveness evaluation is performed regarding the Programme's impact on resource growth (economy, infrastructure) equalization (income, property, utilization of social services and political influence), on special target groups (peasants, women, association members), people's participation, ecology, choice of technology. Also an efficiency evaluation is performed regarding use of financial resources, coordination of activities, handling of key technical services and external cooperation.

This part suffers especially from the lack of social anthropological views on equalization, target groups and people's participation.

The second part analyzes performance of all projects and main service departments. The analysis are performed using the following headings: objectives, achievement, analyses and recommendations. The social anthropological views are missing in all projects, most importantly, extension, animal health and animal traction, land reclamation and adult education.

Limitation of the report

As was mentioned above the evaluation took place in two steps with a preliminary report issued in between. We have found this arrangement very fruitful and would like to recommend future evaluation missions of complex programmes to follow the same disposition. It gave the programme an opportunity to correct misinterpretations in the preliminary report and to furnish additional information in order to give a more correct picture of achievements etc. The Mission, on the other hand, had the opportunity to digest the impressions from the first visit and thus request elucidations to some questions during the second visit.

The main limitations of the report are:

- the rather short time for penetration of a Programme so complex as the zone-1 Programme will certainly lead to misunderstandings and wrongly interpretations of the information given during interviews and discussions. However, this limitation has hopefully been kept to a minimum through the arrangement with a thorough discussion of the preliminary report

- the lack of hard facts regarding programme activities has made the assessment difficult and most of the observations and recommendations are based on a qualitative, rather than quantitative judgement

- as many activities have started only lately it is difficult (impossible) to assess their impact at this time

- the incomplete composition of the Mission (cf above)

The evaluation has followed a traditional methodology for midterm evaluations, effectiveness and efficiency assessment of the Programme and its acitvities. We have tried to be concrete and to reach conclusions and recommendations which are possible to implement without changing neither the strategy nor the Programme considerably i.e. most recommendations should be possible to introduce already during this agreement period. However, we hope that the report also will give a base for negotiation of the next agreement period.

Finally, we would like to express our gratitude for the open and constructive discussion atmosphere we have felt during our stay in Guinea-Bissau. We have not been denied access to any important information and the Mission's proposals for field visits were quickly accepted and implemented.

II SUMMARY

1. General

The core of the zone-one Programme was developed already in the Dutch supported Bachil Project for Rural Extension in the late 70's. However, besides widening of the geographical area the SIDA supported Programme also meant the first concrete trial with the concept of Integrated Rural Development in Guinea-Bissau. This implies that the Programme comprises activities normally administered by different Ministries. An Interministerial Committee has been formed to guide that the strategy is in line with both the strategy for rural development of PAIGC and SIDA. This should imply a considerable involvement of the local population in the planning and implementation of activities for improvement of rural life. The total amount contributed by SIDA up to the end of 1985 will reach SEK 72 million.

The Programme has been launched in an economy which has developed from bad to worse. The GDP has stagnated at a bare 1,5% increase during 1980-82 and a decrease by 5% in 1983. The most unfavorable development of all sectors is experienced in the agricultural sector, the most important one comprising, 55% of total GDP, 60% of all export and about 85% of the labor force. There are strong tendencies towards development of parallell markets and a barter economy. To curb these tendencies and to give impetus to an increase of agricultural production an economic recovery programme has been initiated. It is caracterized by a far-reaching devaluation of the peso (200% up to mid 1985), price increases for agricultural produce, reorganization of the rural marketing, system, improvement of the tax collecting system and a strong inflow of basic consumer goods and implements to the rural markets. The last measure is delayed and very little of the goods purchased by means of an IDA loan and bilateral credits/grants has reached Guinea-Bissau in mid 1985. It is therefore not possible to assess the full impact of the recovery programme.

Besides the distorted economy the zone-1 Programme also experiences the general problems of the rural areas; malnutrition and infections causing high child mortality, illitaracy, adverse climatic conditions, migration, low development of productive forces etc.

Another factor limiting the development efforts is the precarious staff situation on all levels. For a programme in the rural area this shortage is aggrevated by the skew distribution of qualified personnel between central government offices in Bissau and programmes in the provinces.

2. Main conclusions

In general the basic philosophy and strategy seems adequate and with certain shortcomings used in an acceptable way. There seems to be a confident relation between the Programme and the target population.

One of the main shortcomings of the Programme is the lack of systems to collect and analyze data pertaining to progress of implementation. This lack of hard facts has caused difficulties for the Mission to assess properly the impact of the Programme. However, an evaluation of the Programme's effectiveness as well as efficiency has been performed and the main impressions of the Mission can be summarized as follows:

Programme Effectiveness

* The Programme has had only a modest impact on growth of agricultural production in the zone. Based on a conservative estimate of impact of use of improved seed and fertilizer the increase is in the magnitude of 6-7% for rice and less than 4% for groundnuts.

* No evaluation of impact of improved soil preparation (if any) and other techniques and implements has been possible to make.

* The infrastructural development has been around 50% of the plans in PlanOp* except in the health project where the targets have been surpassed. Some projects e.g. village forestry and road maintenance have not yet started proper activities.

* The Programme has started activities in almost 600 villages i.e. the target for 1986 was reached already in mid 1985. The total number of families influenced by the Programme is estimated at more than 24 000 which surpasses the planned 19 500 at the end of 1986.

* 71 villages associations have been founded and in additional 64 pilot village areas the credit programme started activities. The Programme trained 101 village

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* Plan of Operation

associations secretaries.

* Qualitatively, however, the extension programme was not fully acceptable mainly due to inadequate training of extension agents.

* There are no indications of a positive or negative influence of the Programme on equalization of income, property or political influence. However, the Programme has obviously had a positive impact on participation of women in village affairs through the foundation of village associations. In these many women participate and are even elected chairmen.

* Most of the basic infrastructural development in the villages e.g. wells, clinics etc, has meant that every one in the area has an equal right and possibilities to use the facilities.

* So far the Programme has not had any significant ecological impact - neither positive nor negative.

* The level of technology chosen in land reclamation, crop production and transport seems adequate. The Mission, however, noticed with concern that the Programme also was given responsibilites for tractor service to farmers. This could create confusion and in many areas jeopardize the efforts to introduce animal traction.

Programme efficiency

* The financial resources were not utilized according to plans in 1984. The credit programme absorbed more than double the planned Swedish contribution while the projects and extension only utilized 70% of the budget. The financial resources from Guinea Bissau were even less utilized, 38% by extension and 60% by the projects.

* There has been an over-all shift from funds planned for extension and project activities in PlanOp to funds for general administration and the credit programme in the annual budgets 1984 - 1985.

* Improvements in integration and decentralization of decision making have been visible during 1984. However, mainly due to lack of strong project staff, the decision making is still very centralized

* The Programme is well integrated into the MDR structure but the lack of zone-organization of other Ministries hamper a smooth coordination. The MECPIC has so far not appointed a person responsible at the zone level for the Programme.

* Recruitment of key personnel by SIDA has been a very slow process and most positions are vacant in mid 1985.

* Recruitment of other foreign staff has been efficient but made on an adhoc basis lacking proper job description, competitive selection process, standard conditions etc

* Appointment of counterparts is slow - less than 50% of all foreign staff has counterparts.

* The purchase capacity is lacking in the Programme and lax control by SIDA created dubious routines of purchase. This in its turn led to a tight control by SIDA now developing considerable delays in furnishing equipment and material.

* The accounting is manual and based on a rather stereotyped system implying late and undetailed information. No continuous budget-follow-up reports are issued.

* No proper plans exist for a functioning evaluation program. There exist two positions for SIDA-recruitment but no resources for a basic field data collection organization.

* The important current working relations between SIDA and the Programme have not been functioning well during the past years. This is probably due to a lot of factors the main ones being: lack of administrative capacity both in the SIDA-Bissau office and in the Programme to correctly handle recruitment and purchase matters, uncertainty in the Programme about SIDA rules and regulations to be followed.

Project/Department evaluation

The following table summarize achievements and shortcomings of the different projects together with a mark: good, acceptable or not acceptable.

Project	Main achievements	Main problems	Mark
Experimentation	-restoration of two granjas -trial results 1980-1983	-no trials 1984 or 1985 -low standard of work in the granjas -lack of competent personnel	Not acceptable
Land reclamation	-recuperation of about 4500 ha 1981-1982	-only 60% of recuperated land is plouged -lack of socio-anthropological capacity	Acceptable
Animal health	-85% target fulfilment for anthrax vaccination	-low (3-15%) target fulfilment for other vaccination -lack of socio-anthropological capacity	Not acceptable

Project	Main achievements	Main problems	Mark
Animal traction	-high target fulfilment	-delayed distribution of implements	Acceptable
Community forestry	-implementation of three socio-economic studies	-delayed recruitment of consultant -quarrel over contract with consultant	Not acceptable
Basic Health	-construction of 33 village pharmacies -160 BHWs and 148 MWs are working in the zone -14% of deliveries in Cacheu were supervised by MW -more than 80% of all children in Cacheu are vaccinated against BCG, measles and polio	-at times slow material deliveries -the integration of the project in the Programme has been slow	Good
Adult Education	-17 circles with 300 pupils at the end of 1984	-lack of teachers -lack of acceptable buildings -slow start (1984)	Acceptable
Rural water supply	-24 handdug wells have been completed -12 boreholes have been drilled	-slow start (only 1984)	Acceptable
Extension	-influence on 24 000 families -creation of 71 associations -start of a variety of development activities	-poorly trained extension agents -lack of supervisors -too rapid expansion	Acceptable
Credit	-distribution of inputs on credit worth 12,500 contos 1984 -now, acceptable routines	-low repayment -losses due to inadequate system	Acceptable
Training	-training of extension agents on a modest scale	-no personnel -no active participation in other courses than extension	Not acceptable

3. Main recommendations

The report contains more than a hundred concrete recommendations presented mainly in part III 10-13 and part IV. In this summary the main conclusions are grouped together under five headings.

Area consolidation

- The Programme should not expand activities to the Biombo province during the next couple of years
- Only when present areas of intervention have complete teams of extension agents and supervisors, remaining parts of Oio should be included in the Programme. However, no expansion should take place until both complete teams of extension agents and supervisors are available also for these new areas
- A review of present strategy of intervention in relation to different etnic groups should immediately be performed
- Two-year training course for extension agents should be introduced
- Continuous up-grading of extension agents is a must for improvement of performance
- Creation of functioning village associations should be first priority for the extension work. No credit should be given unless the association is considered well functioning.

Administrative consolidation

- The following organizational changes should be considered:
  * creation of an Infrastructure Department directing building construction and road maintenance
  * create a new position as head of Extension Department
  * connect a SIDA recruited agronomist to the Experimentation Department
- The budget should be developed into a tool for decentralization. This demands active involvement of project staff in budget preparations and publishing of timely budget follow-up reports.
- Recruitment of foreign personnel to key positions is probably the singlemost serious bottleneck at present in the Programme. Concrete suggestions for improvement of the situation are given in III.12.1 below.
- Most administrative systems in the Programme need to be elaborated, improved or changed. The most important areas for improvement are:

* creation of an evaluation system
* changing and improvement of the accounting system
* establishment of a proper system for store management
* elaborate and improve the purchase capacity of the Programme

- Training - formally and on-the-job-must be planned for all staff positions held or to be held by local personnel.

Internal integration

- The different Ministries represented in the Programme should consider creation of positions as zone-heads.
- MECPIC should immediately appoint some one to represent the Ministry in the Technical Committee of the Programme
- Coordination of extension activities with individual project activities should be improved e.g. Experimentation should play an active role both as adviser and problemsolver to the extension staff.

SIDA-administration

- SIDA's agricultural Division should play a more active role in the future with regard to policy and control issues in budgets, semi-annual reports etc.
- SLU is supposed to provide an additional management capacity to SIDA. In order to improve performance in this respect it is necessary to clearly define lines of responsibility and authority for all parties involved: SIDA-HQ, SLU, SIDA-Bissau, the Programme.
- It is important that SIDA-Bissau acquire the management capacity necessary for administration of a vast and complex Programme like the Zone-1 Programme.
- The Coordinator should be able to play a key role in the relations between SIDA and the Programme. With a clear and accepted job description he/she could in certain matters - purchases, recruitment - relieve SIDA from some of the control burden.
- Certain short-term measures to solve the present situation are proposed in III.13.1

4. The future

The Mission regards the progress of the Programme as acceptable with certain hesitation. The main achievements have been:

- the creation of a seemingly adequate organization both for control and field work
- extension of area of influence to more than 600 villages comprising of 20 - 25 000 families

- acceptable functioning of a credit system allowing distribution of agricultural implements
- creation of a basic programme for health in the countryside.

However, this mainly quantitative development must soonest be matched with qualitative development i.e. the organization of the Programme must be fed with professional competence to develop viable actions/proposals to the already created village structure. If this is not done the whole programme could easily develop into a nicelooking but empty shell.

Before the next agreement of prolongation is signed the following main areas should be carefully studied and planned:

One important reason to the bad qualitative performance of the Programme is certainly due to the badly functioning of the recruitment process of especially SIDA experts. It is a must that all the key positions defined by SIDA are filled during the build-up phase to initiate basic activities and safeguard the integrated approach. The recruitment process should be a continuous process implying that efforts should be taken long before a contract terminates to find successors. Preferably a stock of potential and interested candidates should be created. This seems utopian but if availability of key personnel is crucial to Programme success, means in the form of different contract conditions etc must be considered.

(Considerable) Improvement of the quality of the extension work is imperative. The extension organization is the key to success or failure for the whole Programme. The two consultancy studies - the village association study and support of rural extension - will probably form an important base for decision of the future extension approach. However, the following areas must be considered:

* Organization of the extension Department. It is necessary to create a separate organization and free the regional Directors from the direct responsibility for the extension service. Special effort must be taken to recruit dynamic and competent head of extension service.

* Training of extension agents. The training course must have a two-year duration and a considerable part of practical training. MDRP should immediately see to it that competent teachers are assigned to the school.

* Retraining of present extension staff. It is obvious that most extension agents lack sufficient training for their important tasks. It is imperative that an extensive upgrading system soonest is introduced.

* Input into the extension system. It was an unfortunate decision to abandon trials in the Programme. There will be repercussions for a long time and even if resources are made available for Experimentation Department (an agronomist) already next year no visible impact will be noticeable until the end of next agreement period. However, importation of ideas, varieties etc from neighbouring countries could perhaps be used for 'direct user trials'.

It is also necessary to concretely formulate a strategy and plan for the training of farmers in management, agricultural and health techniques etc. This is a prerequisite for the farmers' active involvement in the planning and implementation of Programme activities.

However efficient and rich the extension service may be, there will be little effect if the market is malfunctioning or (as is the case in many areas today) non-existent. The Mission is of the opinion that the Ministry of Commerce in the long perspective should be able to assert the functioning of the market. However, in the short perspective the zone-1 Programme must assume certain responsibilities in this respect. We suggest that the Programme intervenes at the level between the villages and the traders. Concretely this could imply creation of consumer cooperatives, development cash crop sales contracts between villages and traders, development of the 'barter type' contacts between traders and villages tried during 1985.

It is also important that a small industry component is introduced at the village level. There is a great interest in the rural area for simple devices to refine agricultural products and the introduction of e.g. animal traction also calls for village level blacksmiths for repair and later production of implements. There exists in the zone-1 already a small industry development programme (see III.13.2). The

Mission believes that the zone-1 Programme has the capacity to coordinate these activities at the village level and inclusion of the programme should be considered during the next phase.

Finally, the Mission would like to recommend some rather crude rules of the thumb regarding the future Programme:

* keep the direct administration costs below 20% of total budget

* keep the cost of the credit programme around 15% of total budget

* increase the budget share for experimentation, adult education, water development (in comparison with 84 and 85) and road maintenance. If Saúde Publica can be acceptably integrated into the Programme its share should also be increased.

III PROGRAMME LEVEL ASSESSMENT

III.1. INTRODUCTION

In this part of the report we will analyze and assess the performance on the Programme level. This implies that we will formulate, based on the above mentioned strategies a number of criteria against which the achievements will be evaluated. This exercise could be called effectiveness evaluation. The criteria can also be found in the terms of references of the Mission (see annex 1). We have chosen to arrange the analysis in the following way:

Impact of Programme on
- growth of resources
- economic social and political equalization
- the position of women
- popular participation
- the ecology of the area
- the choice of technology

The Mission will also make a rather detailed analysis of the Programme's efficiency and especially study
- the organization of the Programme
- the use of financial resources
- the key service activities e.g. recruitment, purchase etc.
- internal and external cooperation

Recommendations brought about by the effectiveness evaluation will be given in part IV while the analysis of efficiency below will contain also recommendations. In the following part IV the separate departments and projects will be individually analyzed.

As for health resources, the base-line applied below is the evaluation carried out in early 1982. Its main conclusions were that intrapregnancy care, assistance in delivery and the health of the newborn deserved additional attention along with immunizations. It emphasized the importance of the first level health-services (health centres) and measures against the great endemics (malaria, hook-worm, tuberculosis) to support the efforts at the community level (health units).

III.2. NATIONAL POLICY AND THE ZONE-1 PROGRAMME

The zone-1 Programme is launched in an environment affected by national trends and policies. The main restrictions for the Programme are the following:

- the austerity budget and freezing of public expenditures has caused difficulties for the Programme to recruit local personnel even those listed in the agreed budget
- the critical import situation of fuel has at times caused severe difficulties
- the important part of the stabilization programme to 'flood' the market with incentive goods is delayed and the zone-1 area lacks all kinds of consumer goods. Together with unnatural price relations this creates disincentives for increased production and prevents full effect even of a very efficient extension programme
- another factor contributing to the disorganization of the market in zone-1 is the policy measure to transform the public 'lojas' to private shops. This has resulted in closing of many public shops without the corresponding opening of private ones. This is a great danger to the already small volume of marketing in zone-1
- in 1985 the Programme only received half of the fertilizer promised in the original plans. This might be an effect of the strategy to give priority to the commercial farmers - os ponteiros - but created obviously harm to the Programme's reputation among the associations which had ordered the fertilizer.

On the other hand, some positive features can also be mentioned:

- the rural development policy of Guinea-Bissau is close to the SIDA policy
- the organization of the MDRP is suitable for the implementation of the zone-1 Programme. However, the planning office, GAPLA, has so far contributed little to the zone-1 Programme. On the other hand, at present the government is negotiating with the World Bank to increase the capacity of GAPLA through both technical assistance and training. This could in a long perspective lead to conflict with the SIDA views of rural development especially the distribution of benefit aspects.

III.3. THE IMPACT OF THE PROGRAMME ON THE GROWTH OF RESOURCES

There has been one main obstacle for the Mission to make a well founded evaluation of Programme performance: Lack of hard facts. No baseline studies have been performed, no con- tinuous collection of data besides village level statistics of the credit programme and fuelusage is made, no separate evaluation studies of various facets of the Progra- mme have been undertaken etc. This could lead to the belief that the Programme continues and expands activities without knowing if these are sensible or not. However, the Programme has through the extension teams a direct link to the target population and has created a commendable system of monthly regional meetings between supervisors, extension teams and the regional Director, where current problems are discussed. Also annual evaluation meetings together with peasant representatives from all pilot village areas are held. This of course does not justify the negligence of systematically collect and analyze data from all Programme activities.

We will later in the report give recommendations regarding necessary base-line and continuous studies to the performed.

Provisions of supplies

One important part of the extension activities is the diffusion of improved agricultural practices. This implies also the provision of agricultural inputs through a credit system.

Up to now no studies have been made to assess the effects of use of inputs on yields in the farmers fields. During the past years the following quantities of improved seed and fertilizer have been planned and actually distrib- uted.

	1983	1984		1985	
	Actual	Planned	Actual	Planned	Actual
Tons of seed					
-rice	36.8	380	138.5	475	89
-groundnuts	7.4	160	117.8	190	79
Tons of fertilizer	71.1	300 1)	280.9	592 2)	196

1) 60 tons of urea and 240 tons of compost

2) 120 tons of urea and 472 tons of compost

The goal-achievement in the quantitative terms shows a considerable difference between distribution of riceseed on the one hand with less than 40% target fulfilment and distribution of groundnut seed and fertilizer on the other hand with more than 75% target fulfilment (except 1985). It should be observed that the seed distributed often is seed collected as repayment of credit which implies, that improved seed should not be confused with certified seed. The Plan of Operation foresees the following rate of application and increase of yield:

	fertilizer per ha	improved seed per ha	yieldincreases per ha
rice	200 kg	50 kg	+300 kg
groundnut	100 kg	100 kg	+200 kg
millet	150 kg	-	+150 kg

In the study of credit and marketing from 1982 (Johan Toborn) much higher figure for yield increases have been used e.g. rice: improved seed +300-400 kg depending on salty or sweet water, fertilizer +600 kg i.e. total about 1 ton/ha, ground-nuts: improved seed 400 kg/ha, fertilizer +400 kg (use of 200 kg) i.e. a total of 0.8 ton/ha.

We will use the following assumptions to assess the impact of input distribution on the total production in the Programme area:

- effects of use of improved seed:

	1984	1985
rice	+ 0,1 t	+ 0,2 t
groundnuts	+ 0,1 t	+ 0,2 t

- effects of use of fertilizer: 1984 + 0,1 t
  1985 + 0,2 t

- the fertilizer distributed will be used for the following crops: rice (80% of all fertilizer)
  groundnuts (10%)
  millet (10%)

These assumptions lead to the following production:

	1984			1985		
	Area sown ha*	Area ferti-lized	Prod. incr. tons	Area sown ha*	Area ferti-lized	Prod. incr. tons
Rice	2770	1124	389	1780	784	513
Groundnuts	1178	281	146	790	196	197
Millet	-	187	19	-	131	26

* Area sown with improved seed

The total normal production in the zone before 1984 was estimated at (see Toborn):

- rice 34,700 tons
- groundnuts 15,000 tons

The contribution to increases in total production has thus so far been modest. In 1985 the increase for rice was only 1,5% and for groundnuts 1% of normal production. If we use the considerable higher figures of Toborn the total increase in production will be:

	1984	1985
rice	1644	1182
groundnuts	527	322

Also these assumptions give as a result only modest increases of production. For 1985 3,5% and 2% for rice and groundnuts respectively.

The above calculations do not take into consideration the possible ways the input is used wrongly e.g.

- seed could be used for food
- subsidized (rather heavily) fertilizer could be resold in e.g. Senegal
- application will probably during the initial years of use be far from optimal.

The remaining input sold, implements, is analyzed in IV 2. The PlanOp does not give any details regarding estimated quantities etc and thus no meaningful comparison can be made.

In return for a collective payment from the population, all the village pharmacies have been kept supplied with the five basic drugs. More than 80.000 doses of vaccine have been administered. The Programme has not been involved in the supply of drugs and vaccines to the health centres or sector hospitals.

Infrastructure development

In many project activities development and extension of existing infrastructure is foreseen. The table below tries to summarize and compare PlanOp figures with those actually achieved.

Most parts of infrastructural development show low target fulfilment. Some projects have not started proper activities during 1984: Community forestry and road maintenance. Land reclamation activities have been kept on a low level due to unfavorable experience of use of the bolanhas after project intervention. Many construction activities are behind schedule due to lack of supervising capacity.

III.4. IMPACT ON SOCIAL EQUALITY (NOTES)

The great majority lives under conditions of subsistence farming and the material level is low even in an African comparison. The most important social stratification that exists in these traditional societies is based on age. Young people are relatively powerless and are put to hard work. Especially in the Balante group, the liberation struggle came to question the authority of the old men, who did not carry arms, over the young men who did. Probably, the authority of the former has returned to some degree after Independence. Its main basis is the belief that the elders have contacts with the spirits, that are the rulers of many things including for example health and disease. The respect for old persons has an element of superstitial fear of punishment, similar to that fostered by the Church in several European countries not so long ago.

However, it is probably not correct to describe the

Table 1 Infrastructure development

	PlanOp 1984	Actual 1984	% target fulfilment
New "bolanhas" (ha)	500	-	0
Recuperation of "bolanhas"	2000	1070 1)	54
Construction of health units	14	23 2)	164
Construction of maternity center	1	-	0
Construction of wells	101	8+32 3)	40
Construction of houses for extension agents	10	3 (in progress)	30
Construction of office for seed control	1	-	0
Construction of stores	2	1	50
Construction of stores in villages	40 4)	21	53
Construction of latrins	123 4)	130	106
Production of tree plants	500 000	65 000	13
Maintenace of roads	100	-	0
Construction of Bula center (m^2)	4000 5)	only in the beginning	> 0

1) bolanhas repaired 1984 but recuperated earlier are not included

2) since 1982 the Programme has contributed to the construction of some 33 village pharmacies, 13 in Oio that had none, and 20 in Cacheu that had 9 or 10. This brings the total number of Health Units up to 42. Another 20 buildings are under construction. Head-quarters (sedes) with stores for the Basic Health Project (BHP) have also been financed, one in Canchungo and one in Mansoa. Considerable improvements in the health infrastructure have taken place outside the Programme as well. Ten health centres have been either repaired or newly built. A new 100 beds hospital was recently opened in Canchungo.

3) 32 constructed by the pumpschool in Sao Domingo

4) not in PlanOp. Figures from budget

5) estimate based on division of cost

village society as being egalitarian. In spite of the existing law there exist in many areas old traditional systems of paying rent to some large landholders. Selling of labour power for agricultural work is not unusual. Ownership of land is not an unimportant factor and the Programme should carefully study implications of its strategy in this respect especially in the bolanha areas.

Marriage is the tool of social ambitions, although not in the European sense. Marital union is a means of creating family alliances and gain control over economic resources, the key resource being human labour-power. In the choice of a partner, personal perference is less important than such strategic considerations made by the family elders.

Differences in monetary income and possessions are certainly much less important grounds for social stratification than in Western societies. In a Balante morança there cannot be starvation in one house and abundance in the next, due to the traditional distribution system.

As for access to services, the most important inequality is determined by geographical location, roads and if they exist, their quality. A privately owned system of small half-open cars ("candongas") is responsible for the bulk of collective road transport. Out-board powered canoes, also privately owned, are important as well. The transport capacity of the Programme and the development of roads must be considered in this perspective (that of equality).

Regarding political influence all village associations are formed only after consent by the base committees - the PAIGC party structure. However, most associations elect officials outside the base committees and the traditional leadership - homens grandes. The latter normally serve as advisors to the associations.

The Programme should also carefully investigate if the intervention strategy tends to create an individualism threating the traditional security system in the villages.

III.5. IMPACT ON THE TARGET GROUP (NOTES)

The plan of operation defines the target group as the 19 500 families in the 600 villages which are influenced by the Programme. These families farm around 3-3,5 ha each.

With regard to the doubts raised in the preceding section regarding land holding equality the Mission strongly recommends a more in-depth analysis and discussion of the target population concept in the next plan of operation. Such an analysis should focus on e.g.

- differences in land holding and selling/buying of labour-power
- especially vulnerable groups in the production process
    * women especially single women with families
    * disabled and old persons
    * 'migration' families
- the role of seniority.

The proposed analysis might lead to a necessity to concentrate efforts on certain underprivileged groups and avoid putting resources at the disposal of the already well-off farmers. In other words, the Mission recommends the Programme to call in question that all 19 500 families need the same support.

The plan of operation also specifically discusses the impact on women. This is important in its own right, but also because the social situation of mothers is literally vital to child health. However, it is more an issue for the future than for the present evaluation, for the Programme's impact on women's situation in society cannot possibly have been great up to now. Still there are several reasons for special attention to this point, one being that the young women often seem to have a stronger personal interest in the development of their own community than do the men, who can go to Senegal for seasonal work and buy things for personal pleasure or move to Bissau in search of opportunities. On the whole there are not many men who do these things, but the presence of such options to the men, but hardly to the women, does make a difference in terms of attitude.

Two specific points for monitoring of the Programme's impact on women:

1. The work load carried by the (young) village woman. Rural water development will tend to decrease this work-load. So should the rice threshing-machine. However, there are

several catches here relating to cultural characteristics.

2. Economic autonomy, i.e. sell things and dispose freely of the returns.

There may sometimes be contradiction with decreasing the work-load; machinery tends to belong in the male sphere and it is possible that the out-put of e.g. the threshing-machine (descascadora) also would, or that the decreased work input of the woman in the processing of the harvested crop would decrease her share.

III.6. PEOPLE'S PARTICIPATION

In the Project PM from 1980 SIDA stressed upon the importance of people's participation in planning, shaping and implementation of the Programme's activities. The Mission has only had possibility to assess the actual participation on the surface e.g.:

- there exist 71 village associations capable of correctly handling the credit programme and to trigger development activities etc. These associations have elected boards and there are free entrance for everybody.
- another 64 villages have organizations capable, according to the Programme, to handle village credits.
- the Programme has trained 101 village secretaries to assume responsibility for the correct handling of village credit.
- initiatives to start construction of stores, latrines, wells etc. are forthcoming from the villages.

The Mission also had possibility to participate in the forthnightly meetings between extension teams and village associations in four villages. In all these meetings there was proper dialogue going on between the farmers and the extension team regarding pressing problems at the time of land preparation.

According to the Programme most associations had elected leaders of the associations outside both the party and traditional organizations.

The Programme has also initiated annual review meetings with one man and one women present from all pilot village areas. In these meetings problems met during the preceeding year are discussed and plans for the coming year defined.

According to outside observers these meetings tend to discuss matters very superficially. The 1985 meeting has therefore been prepared differently. Two months ahead of the October meeting the extension teams initiated discussions and analysis together with the associations about last year's performance.

The Mission has had no possibilities to assess:

- the real participation by the target population in shaping programmes to overcome difficulties
- the average participation by the farmers in a village in the Programme activities
- if there are cases where a small group of farmers have been using the associations in there own interest only
- if certain vulnerable groups are excluded
- if there are differences in participation between different ethnic groups.

The Mission would like to point to three problem areas:

Popular demand is seldom unanimous. The Programme may be manipulated for the personal (or rather "family-") interests of some farmers, e.g. recuperation of paddy-fields. This probably happens easier with a "soft" approach. (It could be called the 'narodnik' problem after the idealistic russian youths who went to live in the rural areas to learn from the People and ignite the fire of Revolution. They were met with suspicion and ridicule and used as cheap farm-hands and they were hunted by the tzar's police and often killed. A stricter definition of a "menu" might help to avoid this problematique.

The administrative capacity of the villages could be overwhelmed. (The 'Jeppe paa bjerget' problem). Training for the village associations could be a remedy. (This will probably introduce a new kind of social inequality, however.)

Transferring responsibilities from the authorities to the local community may soften the influence of the former to the detriment of long-term social development. (The problem of softening the (already) soft, if we use a terminology introduced by Gunnar Myrdal on the political regimes in Asia in the 60's). There are many tasks that central authorities should handle for people, who do pay taxes after all. For example, the slogan "Health by the People" must not become a pretext for leaving the volunteer peasant alone to fight against tuberculosis and obstructed labour (which are surely more central health issues than the common causes of headache, for which he is equipped.)

III.7. ECOLOGICAL IMPACT

It is probably true to say that the program so far has had no significant ecological impact. Nevertheless some of the individual projects or activities within a project do have or might have ecological repercussions in the short or long run.

One overwhelming problem in this part of Africa and in countries that are not far away from Guinea-Bissau is the expansion of the desert. Once the desert is there the process of regaining devastated land into productive and habitable conditions is difficult and in many cases impossible. Every effort must therefore be made to prevent desertification. Within the program especially the village forests project will play an important role in this respect. Reforestation, prevention of bushfires and general awareness of the ecological value of forests are all important ingredients in the struggle against the expanding desert.

Also when cultivating arable land these aspects have to be taken into consideration. Organic matter of all kinds make the soils more resistant towards erosion which is often the starting point for desertification. Testing and developing new methods for cultivation as well as improving old ones with the aim of preserving soil fertility and organic contents will be an important task for those working with trials and extension.

The bolanhas constitute an ecological system that has developed over hundreds of years. The farmers have found a system by which they can control biological and chemical factors and processes in such a way that land, which would in most cases be considered as not arable, can be successfully farmed. Any intervention in such a delicate system might cause unforeseeable and negative consequences. Careful planning and the realization that man himself is part of the ecological system is of utmost importance in order to avoid failures.

It seems as if the traditional managing of the bolanhas has met with great difficulties lately due to the diminishing rainfall during the 80's (see IV.5).

In modern agriculture the use of chemicals is inevitable in order to prevent pests and diseases and to ensure healthy crops. When looking at crop recommendations used in the program one finds however that some insecticides that have since long been prohibited in many western countries because of their high rate of acute toxicity or because of their negative longrun impact on the environment are recommended for use. Such an insecticide is parathione (paraphene, LD 50=8). In countries where this chemical is considered too dangerous to be used it has been substituted by less toxic substances. If this is the case in more developed countries where farmers are literate and well educated, certainly there should be viable reasons for using less toxic insecticides in a country like Guinea Bissau, where most farmers are illiteral and thus are not even able to read directions for use. DDT is another example. DDT has not very high acute toxicity but has proved to have adverse effects on the environment by its ability to accumulate in the animal body and in the long run cause the extinction of species, especially birds of prey.

One way of avoiding or at least minimizing the use of chemicals is diversification of crop production. By avoiding the same crop to be grown year after year in the same field the risk for heavy attacks from pests and diseases are reduced at the same time as, in the case of using leguminous plants in crop rotation, crop fertility is improved. To try to find suitable crops for a diversified production is therefore an important task for the Experimentation Department.

Bushfire

After the fire

Lack of organic content

III.8. LEVEL OF TECHNOLOGY

In this section we will briefly analyze some parts of the programme where choice of technology exists and the choice implies different demands on capacity, maintenance etc. within the Programme.

Transport

This area will be treated in more detail below (see III.11.). The Mission has found the present choice of transport means in general adequate for the activities of the Programme. The Mission, however, recommends to further study the use of rivertransport and the possible use of horses or mules (where feasible, with regard to disease pattern) for extension team transport instead of motorbikes. The Mission has also noted the important decision to create a separate Transport and Maintenance Department. With the choice of means of transport that has been taken it is imperative that the vehicle fleet is kept operational through an acceptable maintenance system.

Machinery service in land reclamation

The Mission fully supports the decision to abandon purchase of the heavy machinery foreseen in the PlanOp and instead concentrate efforts on bolanhas recuperated manually.

Water development

The present technique seems to be well-suited to the rural circumstances i.e. concentration on wells with simple drawing devices instead of boreholes with simple but easily breakable handpumps. Also the man- ually performed digging work with cement casing only when soilconditions demand seems to be an appropriate method.

Animal traction

The Mission is of the firm opinion that if the area to be sown should be increased or if laborpower is restricted the means to use under the Guniea-Bissau conditions should be the introduction of animal tractions not tractors.If rent of tractors is introduced alongside a programme of animal traction the consequences for this latter programme will be directly negative. As the Missions was informed that the zone-1 Programme also was responsible for a tractorhiring programme in some sectors we would like to dwell a little on this subject.

Firstly, tractorservice demands among other things:

- welltrained tractordrivers
- well functioning maintenance and repairsystem with adequate stock of spare parts and skilful mechanics.

Secondly, small fields - less than 0,5 ha - are most economically cultivated by hand. If laborpower is available, within the family or hired, areas up to 2 ha should be manually cultivated. If the area is larger than 2 ha or laborpower is scarce animal traction should be introduced. The farming is then rationalized at a low cost.

Thirdly, if tractorservice is introduced the following circumstances should be at hand:

- hiring should not be subsidized. Subsidized prices will lead to a situation where the farmers adapt a farming-method based on misleading information on profitability of different farming alternatives. When subsidized prices are changed - and sooner or later they will have to be - the farmers have difficulties in going back to, in their view worse but necessary alternatives. The present prices for tractorservice do not even cover the cost of fuel!
- it should never be offered in areas where animal traction is being introduced.
- it should be used only on relatively large field and fields that are carefully cleared. Badly cleared fields

will unerringly lead to destruction of implements and considerable increase of the already very high costs.

- implements used should be adapted to size of fields e.g. it is unnecessary to use a three- or four-disc plow on fields less than 5 ha.

III.9. INTEGRATION OF THE PROGRAMME INTO THE NATIONAL STRUCTURES

The zone 1 Programme has obviously been the first programme of integrated type involving many ministries in Guinea-Bissau. It was not until late 1984 when the present form of Interministerial Committee was established. Then the Ministry of Economic Coordination, Plan and International Cooperation (MECPIC) was made responsible for this important policy body of the Programme. It is too early to assess the performance of this committee but the Mission would like to point to

- (with satisfaction) the fact that MECPIC decided to let the Minister chair the Committee.

- the necessity that MECPIC also on zone-level appoint a competent staff responsible for e.g. follow progress of the Programme, participate in technical committee meetings and continuously inform the Minister of the development.

- that it is desireable with at least two meetings annually to discuss progress in relation to the semiannual reports presented by the Programme. In addition the Committee should approve the annual work plan and Budget. All meetings should be recorded by minutes of meeting.

Regarding the involvment and adaption of the Ministry organizations suitable for the zone organization of the Programme the Mission found the following picture:

Ministry	Commitment	Adequate organization
MDR	High	Yes
MEN	High	No
MOPCV	Weak	No
MRN	High	Yes
MSAS	Weak	No

The Ministry of Natural Resources has recently established a zone level in its organization. A responsible has been appointed and will be based in the Centre of Bula. The regional responsible in Oio will move to Mansoa for the sake of improved coordination with the MDR.

The Ministry of Public Health is presently changing its internal organization. At the time of our visit, a zone level was not foreseen due to lack of cadres, but the final decision had not been taken yet. The daily activities and priorities of the Programme being decided upon in Bula, its health component would certainly benefit from having a representative of the MINSAP stationed there with executive responsibility over that branch of the activities in the two regions and so would the whole Programme.

The Mission recommends that:

- the Interministerial Committee concretely acts to receive full support of the Programme from all Ministries involved in activities.
- if possible a staff with zone responsibility is appointed for all Ministeries.
- also the planned integration of artisenal fishery takes place. As fishery forms part of MDR it should be rather easy to solve this protracted process of coordination.

III.10. FINANCING OF THE PROGRAMME

Due to the extensive one-time devaluation of the peso and the continouos lowering of the pesovalue by 1% per week it is difficult to make comparison between Plan of Operation, the yearly budgets and actual expeditures. However, to determine if the original planned use of funds has been maintained it is necessary to perform a comparison. We will try to reconciliate the different estimates in relative terms taking in consideration the changed pesovalue.

1. Detailed PlanOp vs final agreement

It has not been possible to find detailed accounts of the changes from the original PlanOp to the agreement distribution of funds. At the same time there is a discrepancy between the Project PM and the final agreement as regards funds for the different years. Worst, from the PlanOp to the final agreement the degree of details disappears and in the final document the only remaining figure is a total figure for each year of operation. It is therefore not possible to make comparison between actual use or planned use of funds and the original intentions. The Mission appreciate the need of flexibility in implementation of the Programme but seriously call in question the total lack of intention of use of funds shown in the agreement. We assume, however, that the distribution of funds in the Project PM should be the guidance of the use of funds. The table below shows that the total amount of funds for the plan-period is the same in all these documents:

	1984	1985	1986	Total
PlanOp	26,3	16,5	10,7	53,5
Project PM	18,0	17,0	19,0	54,0
Agreement	16,0	16,5	21,5	54,0

Table 1 Comparison of yearly Swedish contribution (mill SEK)

The following table shows in some detail the differencies in PlanOp and Project PM for the plan period:

	1984		1985		1986		Total	
Service/Project	Pl. Op	In-sats PM	Pl OP	In-sats PM	Pl Op.	In-sats PM	Pl. OP	In-sats PM
Programme Direction incl. Bula Center	11,8	5,5	5,7	3,5	1,3	4,5	18,8	13,5
Training	0,6	0,5	0,4	0,5	0,4	0,5	1,4	1,5
Credits	1,6	1,5	2,1	3,0	3,1	4,0	6,8	8,5
Administration	0,9	1,0	0,9	1,0	0,9	1,0	2,7	3,0
Extension	1,8	2,0	1,6	2,0	0,6	1,0	4,0	5,0
SUB TOTAL	16,7	10,5	10,7	10,0	6,3	11,0	33,7	31,5
Experimentation	1,0	1,0	0,7	1,0	0,6	1,0	2,3	3,0
Land reclamation	1,6	1,0	1,0	1,0	0,4	1,0	3,0	3,0
Animal Health	0,7	1,0	0,9	1,0	0,7	1,0	2,3	3,0
Community forestry	1,4	1,5	1,4	1,5	1,5	1,5	4,3	4,5
Basic health	0,9	1,0	0,5	0,5	0,3	0,5	1,7	2,0
Adult education	0,5	0,5	0,4	0,5	-	0,5	0,9	1,5
Water development	1,5	1,0	0,7	1,0	0,8	1,0	3,0	3,0
Roads	2,1	0,5	0,2	0,5	0,3	1,5	2,6	2,5
SUB TOTAL	9,7	7,5	5,8	7,0	4,6	8,0	20,1	22,5
TOTAL	26,4	18,0	16,5	17,0	10,9	19,0	53,8	54,0

In PlanOp the total contribution from Guinea Bissau is estimated at a countervalue of 28,8 million SEK. In the Project PM the approximate figure of SEK 40 million is mentioned without details.

The main differences between PlanOp and Project PM are the cost for construction of Bula Center, the credit programme and extension. Also, the Project PM allots more to the projects than PlanOp. In the analysis below we assume that the cost for Bula Center will be paid also by Guinea-Bissau and that this extra contributions to a certain extent is covered by increased Swedish contribution to the credit programme. Repayment of credits will in fact be used to partly cover the Guinea Bissau contribution.

2. PlanOp vs budgets 1984-1985. Actual 1984.
(Swedish contribution)

As the Mission was not presented any detailed account of the reduced funds for 1984 (18,0 in Project PM and 16,0 in the agreement) it is not possible to perform a comparison in real figures but only in relative terms. Table 3 shows the planned distribution of funds in "Project PM" for 1984 and 1985 with the budgeted use of funds for the same years. The actual use of funds in 1984 is also included.

	1984 - 1985		1984	1984
	Project PM	Budgets	Actual	Actual in % of budget
Bula Center 1)	16%	24%	16%	57%
Administration	18%	20%	20%	84%
Credit program	13%	13%	23%	216%
Extension	11%	9%	8%	70%
Projects	42%	34%	33%	79%
Total	100%	100%	100%	n.a.

1) Original cost estimate 13,8 million. Reduced by 5,3 million i.e the difference between 18,8 and 13,5 in table 2 above. The cost of Programme Direction is estimated at 1,7 million per year. This implies a cost 1984-185 of 5,6 million.

There is an obvious shift in intended use of funds from extension and project activities to administration, construction and credit when approving budgets and in actual use. One reason could be that the construction of Bula center will be finalized earlier than previously foreseen. This was probably the intention in the budgets but due to delays (see construction under III.12. below) the actual use of funds shifted towards the credit program. It is, however, clear that the funds for the field activities has decreased from the planned 53% to 43% in the budgets and 41% in reality.

3. The contribution of Guinea Bissau

The agreement gives no details of the contribution of Guinea-Bissau. The PlanOp shows details while the "Project PM" only mentions the total figure of 40 million SEK. The table below shows a comparison between PlanOp increased by contributions to the Bula center, the budgets and actual expenditures all in relative terms.

	Total 1984 + 1985		1984	1984
	PlanOp	Budgets	Actual	Actual in % of budget
Bula center	23%	25%	0%	0%
Administration	12%	16%	32%	67%
Credit program	11%	18%	n.a.	n.a.
Extension	16%	7%	8%	38%
Projects	38%	34%	60%	60%
	100%	100%	100%	

The trend is the same as for the Swedish contribution: The budgeted use of funds tend to reduce funds for extension and project activities 54% in PlanOp 41% in budgets.

Unfortunately the accounting and budget follow-up procedures do not allow a proper comparison of the actual expenditures. It is, however, alarming that the very low proportion set aside for extension is so little used.

Conclusions and recommendations

There is a tendency towards (planned) use of funds rather for administration, construction and credit than for field activities. There are no indications that this shift has been commented upon neither in the Interministerial Committé nor in the annual review meetings between SIDA and Guinea-Bissau. There could be a lot of reasons for this shift, the main one probably being lack of management personnel in the projects. However, control bodies should be aware of this tendency and if deemed unsatisfactory take counteractions in the future budget discussions.

The agreement does not give any guidance of use of funds. The Mission suggests that in future agreements, as an appendix, the use of financial resources should be given in somewhat detail. This will indicate the relative wheight the agreeing parties give to the different activities.

The agreement does not specify quantitatively the contribution of Guinea-Bissau to The Mission suggests that in future agreements the same detailed account of Guinea Bissau's contributions should be annexed as is proposed for the Swedish contribution.

The contribution of Guinea Bissau for 1985 will be covered in the following way:

	Contos
Repayment of credits made during 1984	8 000
Paid in kind (seed)	9 500
Paid by MDR-budget	14 000
Paid by US-AID funds	10 000
Approved by Financas	13 500
TOTAL	55 000
Total budget	62 000
Not yet approved	7 000

There are no details in the Processo verbal for 1985 about problems of financing the local costs. The low level of activity in many projects will probably imply that the Programme will not use the whole budget. However, it is unsatisfactory that approval of the budget and work plan for a certain year does not mean that all funds are available. It is imperative that when the two parties sign the processo verbal in the future it is made certain that also the Guinea Bissau contribution is approved by the responsible authorities, probably the Ministry of Finance.

Especially the Water project (cf IV.10) has met with difficulties to receive local funds for payment of salaries. It was agreed with the Minister of MECPIC in October that all local contribution should be put at the Programmes disposal directly, beginning in 1986. This will alleviate the difficulties in the separate projects.

A certain portion of the Swedish contribution is paid to the National Bank of Guinea Bissau to be exchanged for pesos to be deposited on a Program account. The request by the Program for the fourth quarter 1984 was somewhat delayed by SIDA. The payment of about 50 000 US$ was according to receipt executed by Sveriges Riksbank on January 30, 1985. The National Bank of Guinea Bissau did not notify receipt of this sum until May 2! i.e. three months later. This caused considerable problems for the project to pay salaries to extension agents and the bills of fuel. It is imperative that this delay is carefully investigated to avoid repetition in the future and to find out if someone illegally gained interest on the amount (the present level of interest on the international market could give about 2000 US$ during the three month period).

The Mission also suggests that copies of depositions by Sveriges Riksbank is sent to the Programme as continous information.

In 1983 three Toyotas of a wrong model were delivered to the Program. The jeeps were therefore sold to other organizations in Guinea Bissau to be paid for in hard currency. The Programme has not yet received any payment although, payments by customers seem to have been made to the National Bank. The Mission fully supports the proposal that the Bank pay the countervalue in peso to the Programme account. SIDA should then reduce the Swedish contribution for local cost with the same amount.

III.11. COMPOSITION AND INTERNAL INTEGRATION OF THE PROGRAMME

1. Composition

In the preceeding section table 1 showed the distribution of external funds in PlanOp. between different activities in the Programme. In this section we will dwell more upon this issue. The table below shows in some detail the precentage of total funds planned to be used or used by the different activities.

Table 1 Distribution of funds among departments/projects (1%)

	PlanOp 1984-86	Budgets 1984-85	Actual 1984
Administration (including Bula Center)	33	44	33
Credit Programme	14	15	27
Extension	12	8	7
Experimentation	5	3	4
Land reclamation	5	3	6
Animal health	5	3	2
Community forestry	9	11	5
Basic health	5	5	6
Adult education	2	1	0
Water development	7	6	10
Roads	3	1	0
	100	100	100

The same main differences already commented upon in the preceding section is obvious: the change of planned and actual use of funds from field activities to administration, construction and credit.

2. Organization and integration

The organigram of the Programme shown in PlanOp is still valid. However, from 1985 a new Department serving all parts of the Programme was introduced - Transport and Maintenance Department.

The organization is rather complex and resembles mostly a project - staff organization. The staff functions are: Training, Administration, Transport and Maintenance. Besides the proper projects also the Credit programme could be regarded as a separate project. The extension service plays an ambiguous role being both a project in itself and also having staff fuctions vis à vis many other projects, through being their contact organization in the villages. Finally, the organization is also geographically subdivided with regional directions being responsible for coordination of Programme activities in Cachu and Oio respectively.

According to the Mission's opinion the success or failure of a Programme is to a considerable degree linked to the competence of the key personnel. During discussions with Programme staff the Mission has found that:

- The Programme has a competent, very dynamic and dedicated Director with considerable experience of administration of extension programmes. In the final evaluation of the Bachil project it was remarked that initiative and control was too much centralized to the project Director. The same critics could be raised now although certain obvious improvements have taken place during 1984-85 notably through appointment of two seemingly competent regional directors.
  One reason for the still centralized decision making is, of course, lack of strong heads of projects. However, conscious efforts of decentralization must be implemented to avoid decision paralysis in the organization.

- The following department/projects lack strong and competent heads or foreign personnel: Planning and evaluation section, Training Department, Extension Department (now controlled by the regional directors) Experimentation, Village forestry, road maintenance.

- Also the following departments/projects demands capacity increase: Administration, Land Reclamation and Water Development.

Due to the zone concept of the Programme other Ministeries than MDR do not have a proper organization to fit the existing Programme. However, through creation of a Technical Committee for integration of Programme activities was established. It seems as if this Committe is now considered valuable by all projects/ departments.

The Programme has together with SLU developed a budget system which could serve as a base for decentralized decision making.

The reporting system - semi - annual reports - has not yet been used as a means of internal communication. The latest report is, however, qualitatively an improvement. Further only the extension agents are supposed to prepare reports of work performed. No budget follow reports have been issued as information to the projects/departments.

The Mission <u>recommends</u> that:

- The proposed change of the extension management is implemented. This implies that a head of Extension Department is appointed with the main responsibility of carfully follow and control the strategy used in the field. This has up to now been performed by the

Programme Director (see IV.1).

- Construction activities are gathered together in an Infrastructure Department i.e. building construction and road maintenance. A strong and technically competent head would have a considerable impact on performance. If no national capacity can be found technical assistance should be considered.

- Technical assistance immediately is reintroduced in the Experimentation Department (see IV. 4).

- The possibility to have a zone-head of the basic health project is investigated.

- The budget should be used as an instrument of decentralization and control. This calls for an increased involvment of the projects/departments in the budget preparation process and the issuance of quarterly budget follow-up reports.

- A system of continuous (quarterly) reporting from projects/departments is implemented. In connection with preparation of semi-annual reports (based on these quarterly reports) the projects/departments should be called for hearings by the Programme Directions for a joint evaluation and analysis of performance.

III.12. ASSESMENT OF KEY SERVICES

1. Recruitment

Due to the extremly low number of Guineans trained during colonial time and in spite of the efforts to counteract this situation after 1974 the scarcity of qualified staff on all levels is a major bottleneck for development in Guinea-Bissau. This situation will prevail for many years. Technical assistance is therefore necessary to fill key positions.

However, there should be a careful analysis of the actual situation to determine the best trade-off between personnel and merchandize. It is also important to recruit counterparts whenever possible, to fully utilize the often expensive expert to a maximum by obtaining on-the-job training and transfer of knowledge. The Program has used three different sources of recruitment of foreign personnel:

- through SIDA
- through consultancy contracts
- through direct recruitment in Guinea Bissau and Portugal.

We will try to assess these sources in turn.

SIDA recruitment

In the PlanOp 27 positions are foreseen for external recruitment. However, there is no indication of division among the above mentioned categories. In the Project PM ten positions are identified for SIDA-recruitment. The budgeted man-months of SIDA positions for 1984 and 1985 as well as actual man months 1984 and estimated 1985 are shown in the table below.

	Budget	Actual (estimated actual)	%
1984	86	33	38
1985	42	33	78
Total	128	66	52%

The 1985 budget excludes the following positions foreseen in the "Project PM": agronomist, farm manager and mechanic. The latter is recruited through Fundamento, a Portuguese enterprise. The SIDA recruitment has met with many difficulties:

- slow process of receiving final document to start recruitment (the PAR)
- incomplete job descriptions
- low interest on the Swedish market for jobs in Guinea Bissau
- confusion on the future role of SLU and the future type of employment contracts to be used
- mistakes in the selection process

This resulted in a very low percentage of position filled in 1984. For 1985 an improvement took place mostly due to contracting of Orgut for the forestry project (see below) and the exclusion of some positions i.e. only six months of positions not yet filled at the end of 1984 were included.

The standard cost for a SIDA employment was 563 contos in 1985. Due to reduction of the standardcost by the amount of housing this cost will be lowered in 1986.

Consultancy contracts

Due to the apparent difficulties in recruitment and the cost of administering experts SIDA has started recruitment of consultancy firms to resume responsibility for implementation of projects, part of Programs or whole Programs. Within the forestry field this is a rule rather than an exception. In mid - 1984 SIDA commissioned SLU to contract a consultancy firm to implement the community forest project in the Zone-1 Programme. Unfortunately this process created serious tensions between the Programme, SIDA-Bissau, SLU and Orgut, the contract winning consultancy firm, a tension which yet prevails. Due to, among other things, late involvement of the Programme in the purchase process and lack of a portuguese version of the contract, the Programme refused to accept a contract based on a signed letter of intent between SLU and Orgut. The effects of this have so far been a six months delay of execution of the contract, compensation payment to Orgut of more than SEK 100 000 and a probablematic line of authority and responsibility between Orgut and the Programme.

Another contract between SIDA and SAWA, a Dutch company, has been operating without problems. SAWA recruits personnel to the land reclamation project.

The figures below show the budgeted and actual number of man months during 1984-85.

	Budget	Actual	%
1984	19	19	100%
1985	66	48	73%
TOTAL	85	67	79%

Other recruitment

Most foreign experts in the Programme are recruited through other sources than SIDA. Unfortunately, a lot of different contracts with different conditions exist although it seems as a certain standardization has taken place recently. Further it was not until April 1985 as acceptable job description for the various positions were prepared. This implies that most persons are recruited without a careful control and comparison of merits against a detailed job description. Further, the employment procedure did not normally contain a competition aspect but was rather based on personal knowledge of the concerned candidate to a position.

In a few cases personnel has been employed by Fundamento - a subsidiary company to John Mattson AB - a portuguese enterprise. A fee corresponding to 15% of the salary is charged for preparation of the contract but obviously for nothing more. One of the contracts with a salary of about SEK 30 000 per month costs the project more than SEK 50 000 per year! For nothing.

On the positive side must be noted that the Programme would have been suffering from staff shortage during a considerable time if these contracts were not in operation. During 1984-85 SUCO-recruited personnel (now paid by SIDA) continued the investigation work within the forestry project. They will be replaced by Orgut-recruited personnel during 1985. The following table shows the planned and actual situation during 1984-85.

	Budget	Actual	%
1984	190	188	99
1985	190	178	94
TOTAL	380	366	96

The average cost for this category of personnel is 265 contos per month (with a maximum of 525 contos).

Counterparts

The ultimate goal of technical assistance is to make itself unnecessary through transfer of knowledge. This assumes that all foreign staff should be assigned counterparts to train.

The following departments/projects have either a national head or counterpart to a foreign head: experimentation, animal health and animal traction, primary health, adult education, water development and transport and maintenance i.e. 6 departments/projects. The following lack counterparts: land reclamation, village forestry, credit, training, administration and planning department i.e. 6 departments/ projects.

Conclusions and recommendations

In the latest processo verbal SIDA indicated that certain positions were considered key position for administration of the Swedish aid, and should therefore be recruited through SIDA. The Mission realize the need of recruitment of certain highly qualified staff on somewhat more expensive contacts but at the same time, considers it imperative that these positions are not left vacant during lengthy period of time. The Mission thus supports the agreement in processo verbal that after six months candidates can be suggested by MDR if SIDA cannot present a qualified candidate. SIDA should, however, also widen the scanning area and contact other Nordic countries or FAO to find suitable candidates.

It is obvious that SIDA (SLU) up to now has met with difficulties in finding suitable persons for the Zone-1 Programme. The Mission recommends certain concrete steps to be taken to improve the situation:

The preparation of a small pamphlet of Guinea Bissau emphasing the advantages of a country to work and live in as well as counteracting many incorrect representations of the country.

A more forceful recruitment process. The Mission apprehends that the protracted process of founding a consultancy enterprise within SLU has created an attitude of "wait-and see" in the ongoing recruitment process. The Mission appreciates the necessity of widening the market of finding candidates by offering other contracts than the regular SIDA-contract. However, if this is not possible through SLU other solutions should be examined and anyhow, the choice of contract form must not affect the effort of finding suitable candidates.

In view of the detoriating security situation in Mocambique and the difficulties to continue technical assistance in many projects, SIDA should assess the possibility to recruit personnel leaving Mocambique for Guinea-Bissau. This includes SIDA experts, FAO-experts as well as MONAP-cooperants.

Bula is a small town offering little of service and facilities of recreation. To attract personnel, both foreign <u>and</u> national it is therefore necessary that the Bula center is equipped with certain facilities. In the existing plans a tennis-court and a football field is included. The Mission recommends that also the following areas are <u>investigated</u>:

- a small playground and swimming facilites for children
- appointment of (parttime) responsible for social activities within the Bula centre. Such activities should include lectures, film shows, library build-up, joint festivals etc
- establishment of a 'sala de convivio' (clubhouse) where people could meet, drink a beer or a soft drink, play games etc. We consider this important to facilitate 'over-the-border' contacts between the different nationalities represented in the Programme also outside work hours
- the Mission, on the other hand, is very dubious to construction of swimming pool for grown-ups as this certainly will imply both health hazards and social problems of admittance.

To guarantee an acceptable level of security in case of illness SIDA should investigate the following means:

* the capacity and level of service in the new hospital in Canchungo and the possibilites for Bula employed personnel to receive treatment there.
* the possibility to station a nurse in Bula to be used as reference nurse for Programme personnel as well as an extra resource to the basic health project.

There seems to be confusion regarding responsibility for service of the SIDA recruited personnel. SIDA-Bissau and the Programme should soonest formulate clear guide-lines of "who-does-what" and inform the personnel accordingly.

In relation to contracts with consultancy companies the Mission considers it imperative that the Programme is involved in an early phase of the purchase process and that the final document is issued in a Portuguese version before signing the contract. All contracts should also explain clearly the lines of authority and responsibility and give the Programme Direction influence over the work of the contractor.

Besides long-term consultancy contracts the annual negotiations also define areas scope and time of short-term consultancies. There seems to be a tendency from the side of the Programme to change considerably this agreed consultancy programme. In view of the often narrow resource base the Mission consider it important that such changes are not made that treaten to give the Programme bad reputation within the consultancy groups. It is thus essential that the Programme carefully analyzes the need of and the capacity to receive consultants <u>before</u> the final plan is approved in the annual negotiation.

Regarding other sources of recruitment the Missions appreciates the necessity to use these and finds them valuable. However, to meet certain minimum requirements of objectivity in the selection process and to avoid inefficient use of funds the Mission recommends:

* that all positions should have a carefully designed job description <u>before</u> any active recruitment starts.

* that all vacant positions should be advertised and the recruitment should be a competitive process where the candidates qualifications are carefully compared to the demands of the job description.

* the three-party agreement between Portugal, Guinea Bissau and Sweden gives SIDA a subordinated role in the selection process and in the decision of salary level. With regard to the rules of employment of SIDA personnel where both parties should approve the candidates it is suggested that the same procedure is followed with regard to the other foreign personnel.

* that the salaries are established on a reasonable level. According to information to the Mission the normal salary of a book-keeper in Portugal is around SEK 2 500 and a person with University degree earns about SEK 4.500 after tax. It is reasonable that a job in Guinea Bissau should be considerably higher paid - say 100% more - than in Portugal considering all difficulties involved in moving to a new country. But it seems as abuse of foreign exchange to pay salaries of five or six time the normal salary in Portugal. In comparison with e.g. the MONAP contracts in Mocambique the salary level is very high.

The Mission was content to find that Guinea-Bissau and SIDA had reached an agreement during July to use a standard contract with three defined levels of salary, that contracts through Portuguese companies should be abandoned as the Mission could find no advantages worth the often very high fee, and that counterparts are recruited to all positions with foreign personnel. There should be no technical assistance position viewed as "life-time" employment. A plan for replacement of the foreign personnel should be prepared.

2. Purchase and storage

Another key service for the smooth functioning of the Programme is the purchase process. Resembling many other development programmes no specific capacity to handle procurement matters was built into the Programme. Unlike many other development projects supported by SIDA the Programme, however, obtained permission to carry through purchases of a rather large portion of the budget. This permission was granted without a proper check if the Project had the capacity and the knowledge of how to correctly perform a procurement.

During a consultancy study[1] performed in the beginning of 1984 many severe mistakes in the purchase procedure were de- tected as well as lack of understanding of basic requirements in procurement.

As an effect of this all purchases by the Programme were channeled through SIDA. Presently, with a considerably delay of most purchases, the Programme attributes this delay to the changed routine.

When we examine the reasons behind the protracted purchase process we have found:

- that the programme lack capacity and background material to make well specified orders and/or direct purchases
- that the SIDA office in Bissau often takes an unacceptable long time to treat the orders and prepare them for final request to SIDA's Purchasing Division
- that SIDA's Purchasing Division in order to follow the purchase regulation and often hampered by a tight personnel budget takes a considerable time to carry through the purchases
- that the irregular transport situation delay most deliveries considerably
- that the process in the custom, airport and harbour is time consuming and worse, very unsecure with many thefts which cause re-ordering and thus delays the goods for many months.

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1) See Bartling: Report on a study of the purchase situation within the SIDA-development Programme in Guinea-Bissau.

The Mission recommends that:

- the present division of work and responsibility is reviewed when a deputy co-ordinator is in office. The deputy co-ordinator should have experience from procurement and the Programme could assume increased responsibility after his arrival. The following measures should then be considered:

    * the direct use by the Programme of a fund of maximum SEK 25,000 in Senegal for urgent purchases. This fund should be of a revolving type involving not more than 1% of the total procurement budget per year.
    * direct link between the Programme and a Swedish agent (type Broström used by MONAP in Mocambique) for purchase orders of a maximum of SEK 25,000

    * possibilites to standardize certain purchases such as hoes, knives axes etc. either through e.g. a three year purchase contract with call deliveries or direct purchases from a certain supplier where SIDA only controls the prices offered.

- immediate build-up of a catalogue library for goods frequently purchased. SIDA's Purchasing Division should assist in this matter.

- SIDA-Bissau within one week after receipt of a written order should either contact the Programme for further information or prepare final request to SIDA's Purchasing Division. Under no circumstances should an order lay idle in the SIDA-office more than two weeks.

- SIDA's Purchasing Division should monthly inform the Programme of the status of purchase orders

- SIDA's Purchasing Division should delete items not satisfactorily spec- ified from an order of many items and start procuring the remaining items. The deleted item could after completing be added to the original order or separately handled. The Programme should prepare the work plans based on the fact that the delivery time of orders through SIDA is at least six months. This also calls for an immediate start of specification and preparation of orders following the approval of the budget

- SIDA should carefully scan the transport market and if possible influence shipping companies to maintain regular callings at the port of Bissau. This is of course of national interest in Guinea-Bissau and MDR should voice its concern of the situation in the proper assemblies

- an agreement should be reached between the Programme and the port and airport authorities of a standard procedure to get imported goods quickly and safely out of the har- bour and airport.

- SIDA's Purchasing Division should correctly assess if the Programme has the technical competence to present a correct specification and not as a routine employ a consultant to evaluate purchase orders involving technical specifications (concrete case: the order of generator to Bula center) Such consultancy is often costly and time consuming.

Besides the stores of the credit programme (see IV.2) the Programme operates stores in Bula (central store), Bachil, Bissorã, Ingoré and Begegne.

The responsibility for the stores has been transferred to the newly estblished Transport and Maintenance Department. The procedures and routines governing the storage operations up to 1985 have been unadequate and even nonexistent. No inventory has been made and withdrawal routines have been too weak to allow for an acceptable control. It seems as if many deliveries are not even registered in the stores. Improvements have been made recenly and detailed inventory has been taken in Bachil and Bula and is starting in the other places too.

3. Financial planning and control

A basic rule in enterprises and organizations where financial planning and control is essential is that the following part should be congruent:

$$\begin{array}{ccc} & \text{Organization} & \\ \swarrow\!\!\nearrow & & \nwarrow\!\!\searrow \\ \text{Budget} & \longleftrightarrow & \text{Accounting} \end{array}$$

This implies that the budget system has the actual organization as a base for division of cost and revenue responsibility. The accounting system should then record actual disbursements and receipts rapidly in the same categories as the budget shows the planned use of funds.

The Zone-1 Programme has presented budgets of acceptable standard during the past two years. This has been done in cooperation with SLU and the main responsibility for the final product has remained with SLU. Hopefully, the Programme now has aquired skill and capacity to independently prepare future budgets.

The budgets reflect the organizational structure of the Programme. The accounting procedures in the other hand shows many signs of weakness:

- it has not been possible to issue monthly or even quarterly budget follow-up reports
- all book-keeping work is performed manually
- the system followed is the one proposed (demanded) by the Ministry of Finance. This system is based on the old colonial portuguese system which in its degree of details is not sufficient in many development projects.
- information from SIDA of actual payments is normally very late and mostly in Swedish and therefore difficult to understand.

During 1984 a consultancy report (Steneroth) was prepared regarding the administrative systems of the Programme. The detailed draft of an administrative mannual was sent to the Programme is only one copy! and up to now no action based on this consultancy work has been taken.

As was mentioned above the store accounting has been weak. At present a physical control is executed but no accounting based on value is performed.

The Administration Department lacks a national book-keeper and two secretaries and, most important, a national Head of Department. Part of the operation involving cash-payments of salaries takes place in badly designed premises.

In September it was obvious that the personnel situation in the Finance and Administration Department had developed into a very serious state. Both the two expatriates will finish their contracts at the end of the year and recruitment for replacement had not yet started. It is also clear that the austerity measures taken by the government including prohibition to recruit to new positions has prevented an adequate local staffing of the Department.

Based on the above information the Mission would like to give the following recommendations:

Measures should immediately be taken to recruit personnel to the Department both local and foreign. With regard to foreigh personnel the Mission would like to suggest that the programme extend the search for candidates also to Sweden. It is possible to recruit personnel for 'cooperante' salary and SIDA will help in portu- tuguese training of candidates (this was made for MONAP).

The Mission suspects that the treatment or rather non-treatment of Steneroth's report is symptomatic for most consultancy reports. (N.B. not only in the Zone-1 Programme). To avoid this it is important that firstly the Programme is fully convinced about the need of a specific consultancy assignment, secondly that the Programme actively participate in preparation of terms reference, thirdly that the Programme facilitate realization of the consultancy and finally that the Programme carefully study and discuss the final report. Also SIDA should take an active interest in a scrutiny of the final report. The Mission suggest that a final seminar should be held on every consultancy report with participation of relevant Programme personnel and representatives of SIDA. In cases of exceptionally important studies participation in this seminar by the author should be contemplated.

The Programme should work out a detailed plan of accounts mainly based on the budget and an analysis of the need of financial information to correctly guide and control the Programme. This plan should as a minimum show for all departments and projects the cost divided into: Foreign staff, local personnel, cost of transport and travel, construction, equipment and material and cost of services. Further breakdown of especially equip- ment and material is necessary to reach a good level of cost consciousness within the organization. This proposed plan of accounts should be presented to SIDA and Ministry of Finance for approval.

A study of the possibility to use either book-keeping machines or a minicomputer should be made. With the increase of the credit volume and the need of detailed evaluation studies the Mission do not find it too sophisticated to consider purchase of a small minicomputer. It seems as if SIDA is investigating the same proposals in other countries and projects and the result from such studies could perhaps be a base for the proposed investigation.

The Administration Department should soonest start issuing quarterly budget follow-up reports. It is also imperative that SIDA-RED issue quarterly reports not later than two weeks after the end of a quarter.

The budget process should involve at least all heads of Departments and projects. They should formulate the concrete targets to be reached and cost of operation within the frame of budget presented by the Programme Direction. The budget should then be used as an instrument of decentralization of decision making i.e. the heads of Department/project should be responsible for use of funds, preparation of purchase orders etc. for their respective departments/projects.

As a normal practice, SIDA only undertakes audit in the form of evaluation of performance. However, lately, in some other large programmes e.g. MONAP in Mocambique, also "cash" audit has been introduced. Also in the Zone-1 Programme agreement annual audit by an independent auditor is foreseen. The Mission is of the opinion that cash audit should be a rule in all programmes/projects supported by SIDA to avoid the otherwise spectacu- lar decision to undertake an audit. The Mission therefore recommends that an independant auditor soonest is appointed to review the period 1981-1984 (the period of SIDA-financing). Aside from the general belief by the Mission that audit should be a normal procedure the following points also emphasize the need of a formal audit:

* the established defraud of more than SEK 150 000 in the credit programme

* the payment of US$ 60 000 in November 1982 to Luso Comercial did not result in delivery until November 1984 i.e. two years later.

* payment to two suppliers in the beginning of 1983 for the same material. Only one delivered. The most expensive one, Pincha (with double the price of Gustavo Cudell), has not yet - 2½ years later - delivered and no one has so far followed the matter up.

* the unsufficient control of the stores and lack of acceptable movement routines during many years

* the not forthcoming of payment in foreign currency for cars sold to other Guinean organizations.

* formal accusations and many rumours of incorrect handling of Programme funds. This point is, according to the Mission's experience a normal type of accusation in programme involving large funds and large purchases of material and equipment. To curb this type of formal or informal accusations is one important reason for annual audit.

4. Evaluation

Based on the good experience from development projects in Ethiopia, SIDA pushed for creation of a Planning and Evaluation unit within the Zone-1 programme. The unit comprised in both 1984 and 1985 budget positions for economist and socio-anthropologist as technical assistance input and in 1984 a position, head of the unit, as local input. The unit was equipped with one small standard car. Unfortunately the recruitment proved difficult and the unit was not staffed with both an economist and socio-anthropologist until early 1985. The position as head of unit was not included in the budget of 1985.

As a result very little if any concrete work in the evaluation field has been performed up to now. (see the discussion of hard facts under IV.2 above). No basic work has commenced in identifying an evaluation programme i.e. methodology to be used, identification of important baseline studies, information and collection systems etc. There are some reasons for this:

- the normal tendency by a Programme Direction to rather utilize Planning an evaluation personnel for planning or executive tasks than for evaluation work
- the dubious job description on which the economist was recruited in 1982. The evaluation task was mentioned at the end of the job description which instead emphasized marketing and credit programme activites. The present holder had experience of these latter activities which he has never been permitted to participate in, while his experience of evaluation was much more limited
- lack of staff (see above)

The Mission considers the evaluation activity as a key activity. Without proper feed-back of the impact of different activites the Programme Direction could never be certain that the Programme is adequately composed, works efficiently etc.

The Mission recommends:

- that the Planning and evaluation unit is properly staffed and equipped. This implies among other things employment of at least three-four statistical assistants (enumerators, data collectors) necessary to collect field data. It is unrealistic to plan using the extension agents or other personnel for this data collection if the evaluation activity should get the weight the Mission proposes. The unit should also dispose of two four-wheel drive cars.

- that the following base-line and later continuous studies are commenced soonest: crop sampling, health study, household and consumption study and credit study.

- that the socio-anthropologist starts collecting systematically existing experience of intervention into different ethnic societies (see extension IV:1).

- that a programme of evaluation is formulated , time and resoruce planned etc, before mid-1986. This programme should also consider the use of consultants and so-called Minor Research Tasks (MRT) as complements to own resources.

- that all evaluation reports are subject to seminar presentations for concerned departments/projects and external participants.

5. Construction

The main construction activities have been concentrated to establishment of a project center in Bula. The total area to be constructed during the three phases comprises about 6000 m^2. The first phase was completed at the end of 1984 although certain completion jobs are still ongoing. This phase comprised construction of about 1600 m^2, infrastructural work of the whole area including water and roads. Ten residential houses, administration building, car workshop and store were constructed during this initial phase. The cost per m^2 was rather high - SEK 4, 200/m^2 - compared to the standard achieved. The later constructed SIDA-house in Bissau costing about SEK 1 000 more per m^2 is of a much better quality and it is constructed by the same company, Ancar a Guinean enterprise. Among the reasons for the low standard the long delayed building process and the rather high cost could be mentioned:

- difficulties for the contractor to attract good professional workers to the site in Bula.

- frequent changes in drawings and even ready constructed structures by the Programme.

- inadequate construction control by the SIDA-employed building officer. This position was placed at the Ministry of Public Works where he was used for many other things than for the main duty of controlling the Bula construction. Instead of every other day visits which should be natural considering the size of the programme he visited the site perhaps every ten-fourteenth day.

- the necessary infrastructure to commence construction is normally expensive.

Regarding the second phase this comprises about 3 200m^2 and due to the devaluation of the peso the price will be only SEK 2050/m^2 . It is about four months delayed but will be fully completed before mid-1986. During this phase will be constructed: another 10 residential houses, school building, dormitories for 50 students, kitchen and dining-room for students, guest houses, another administration wing, mechanical workshop and carpentry, store, laundry and guard houses.

The third phase contains sixteen living quarters for Programme workers with a total area of 1300 m^2 at a cost of 1950 kr/m^2. The contract for the third phase was given to a national company (CUF) in January 1985 and completion time is 24 months. Besides this extensive construction of the Bula center performed by contractor the Programme is involved in many other infrastructural activities:

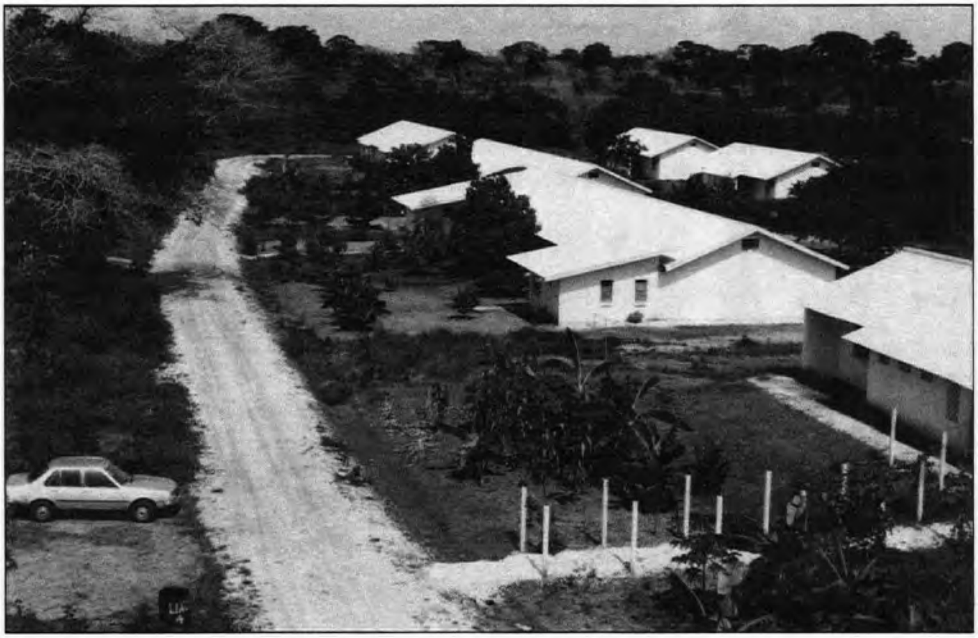
- construction of combined offices and residential centers in the sector capitals
- recuperations and improvement of stores
- construction of ponds and drilling of boreholes
- construction of stores etc in villages
- (probably) maintenance of secondary roads

The Mission recommends that:

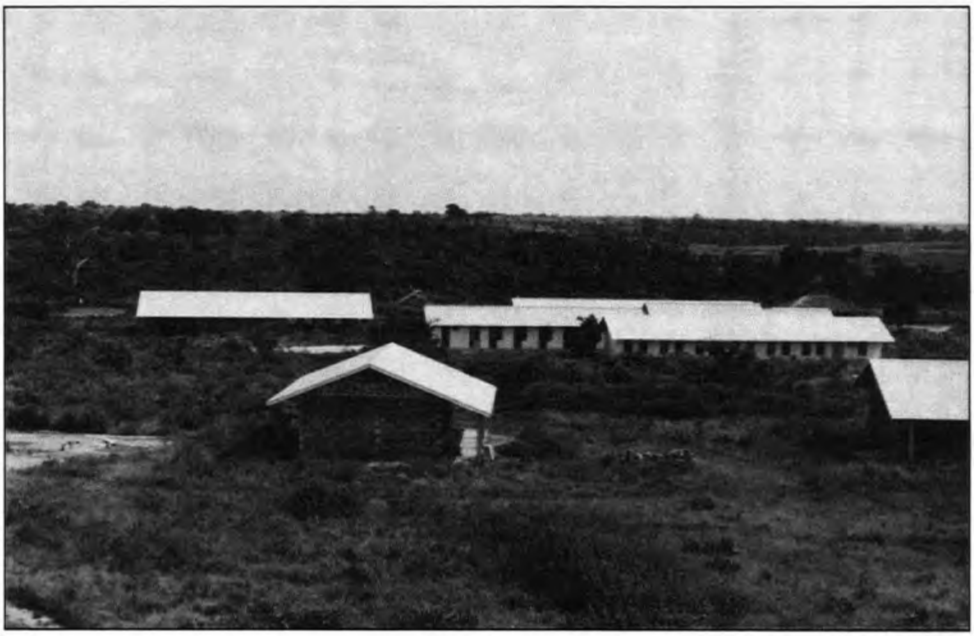
- in view of the variety of different construction activities these should be grouped together in an Infrastructural Department comprising, building construction and road maintenance. It should be investigated if such a Department ought to be supported by a civil engineer.

- the sector centers should be planned to accomodate not only extension personnel but also personnel from projects of different kind e.g. animal traction, water development, health etc. A standard design should be developed for these centers to facilitate and speed up construction.

- a design for a simple schoolhouse to the adult education programme should be developed.



Residental area of Bula Center



Administration buildings and (under construction)
the school-buildings, dormitories and dining-hall

6. Transport and maintenance

The transport and maintenance service was originally foreseen to be administered by the Administration and Finance Department. However, during 1984 it became obvious that these services should be given more emphasis considering their key role in effeciently operation of the Programme. Therefore a new department was formed in December 1984 with a separate staff being responsible for

- the proper management and maintenance of vehicles and machinery
- planning of the proper transport fleet
- all stores of the Programme except the stores of the credit system
- installation and operation of the radio system of the Programme.

This separation of transport service from other administrative services has proved to be a correct decision. The Mission has found that during its short time of operation the Department has successfully:

- started on the first extensive inventory of the Programme ever. The Bula and Bachil centres are completed and work has started in Bissorã
- introduced seemingly adequate forms and routines for stock movements, maintenance service and fuel utilization
- started introduction of a preventive maintenance scheme of vehicles
- almost completed the workshop installation.

However, much remains to the corrected before the Department can be considered working efficiently - the present life expectancy of vehicles is far from satisfactory. The main problems at present are:

- lack of spare-parts. This is mainly due to late ordering from the Programme but the delay worsens by the slow purchase procedure
- lack of competent mechanics and insufficient resources for training of mechanics
- lack of maintenance instruction hand books
- insufficient workshop space

- deficient level of training of vehicle drivers.

The composition and condition of the transport fleet in mid-May was the following:

	In good condition	In acceptable condition	To be replaced	Non-operational	Total
Standardcars[1)]	1	1	6	3	11
Jeeps	15	1	3	-	19
Lorries[2)]	4	1	3	-	8
Tractors[3)]	1	9	-	11[4]	21
Motorbikes	19	36	48	16	119
Additional Vehicles[5)]	-	-	6	-	6
Total	40	48	66	30	184
% of total	22%	26%	36%	16%	100%

1) including five Peugeot pick ups
2) including three Unimogs
3) not financed by SIDA but operated by the Programme
4) so-called Kim-Il-Sung tractors not to be operated according to order of Minister of Rural Development
5) not financed by SIDA but operated by the Programme. Included are one lorry, one Peugeot pick-ups and four landrovers, all in condition of being replaced.

Regarding the distribution of vehicles among Departments/Projects the following was valid in Mid-May:

	Standard cars	Jeeps	Lorries	Motorbikes	TOTAL
Programme Direction	4	1	-	3	8
Regional Direction	1	4	5	-	10
Other departments in Bula center	3	2	-	22	27
Extension	-	-	-	74	74
Projects	4	16	4	20	44
TOTAL	12	23	9	119	163

More than half of all vehicles are either inoperational or in replacement condition. It is especially standard cars and motorbikes that fall in these categories. Most standard cars were bought in 1982 i.e. the economic life time is only around three years. Also motorbikes and jeeps from 1981 are in replacement condition.

The composition and size of the transport fleet seems to be acceptable for the operations involved considering the possible life of the vehicles. However, the number of standard cars is doubtful and also the loading capacity of the Unimog lorries.

The distribution of vehicles between controlling and executing parts of the Programme seems acceptable. The lack of other vehicles than motorbikes in the extension service is "compensated" by vehicles in the regional direction which have a coordinating function vis à vis extension.

The Mission recommends that:

- The Programme should standardize the vehicle fleet to facilitate keeping of space-part stocks and reparation. It is, however, noted that already now a certain standardization has been attained.

- Courses in driving and preventive maintenance both introductory and follow-up, should be compulsory for all drivers of project vehicles. Especially the extension agents, supervisors and contabilista volantes should be trained.

- Plans for necessary workshop extension immediately are prepared and if feasible amended to the present construction contract.

- The need of standard vehicles is carefully analyzed before replacement takes place

- Other makes than the apparently weak Casal are investigated when replacement of motorbikes takes place.

- That stocks of spareparts notably for motorbikes are established in the sector centers now being constructed.

- The possibilities to improve coordination of transport means and needs through e.g. Transport and Maintenance department are investigated.

- The need of lorry transport during the coming years is carefully investigated and planned (see V.2 below).

The Mission further supports the Department's proposals to purchase a two-cabin jeep and equip this with tools, thus creating a mobile workshop, and to improve the quality of work by continuous training of workshop personnel - on-the-job as well as through training with make workshops abroad.

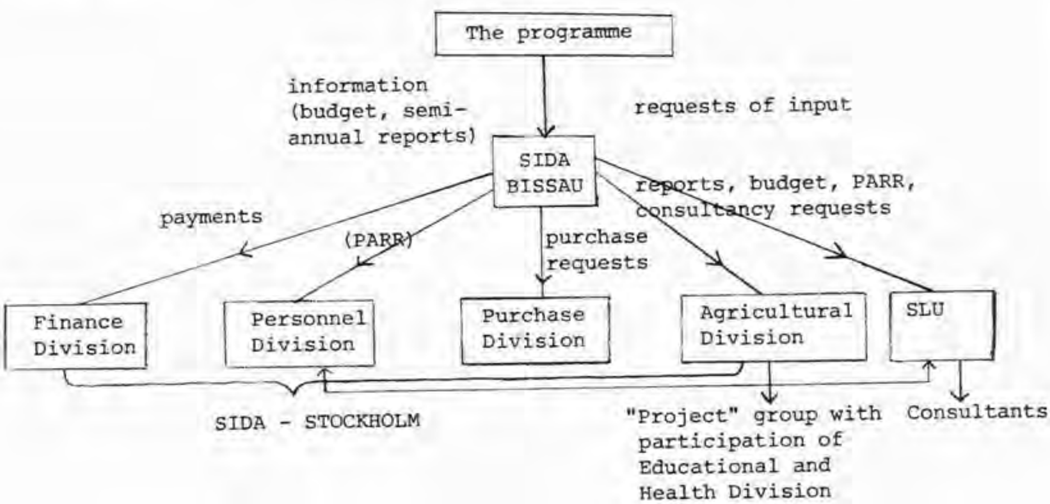
Finally, the Mission recommends that a small investigation is made regarding the possibilities to utilize transport by boats. Most of the programme area is crossed by rivers and boat transport could be an inexpensive method compared to land transport. It will also give more flexibility during the rainy season.

III.13. EXTERNAL COOPERATION

This part will mainly analyze the relations between the Programme, SIDA and SLU. At the end, also a brief review of other external contacts will be given. As the interrelations between SIDA and SLU are considerable it serves no purpose to differentiate the analyzes in two separate parts.

1. Relations to SIDA and SLU

The following figure shows the Missions understanding of the rather complex relationship between the Programme, SIDA and SLU.



An efficient operation of the Programme requires that the links shown in the figure are well-defined and understood by the parties involved as well as an acceptable performance and capacity of the different parties. Some of the deficiencies and problems have already been discussed in the preceding chapter e.g. accounting, purchase and recruitment. In this chapter we will instead concentrate on the functioning of SIDA-Bissau, Agricultural Division and SLU.

Agricultural Division

This Division has the main responsibility for administering the Programme from the SIDA-HQ level. This implies that the Division together with other involved Divisions (project group) shall review semi-annual reports and annual budgets and make certain that plans and progress is in accordance with agreed strategy and plan of operation. In connection with the start and prolongation of the Programme the Division also has the responsibility to make certain that the main content of the SIDA-strategy for Rural Development is satisfied and also to concretely spell out what this strategy implies in a certain Programme.

The Mission is of the opinion that the Agricultural Division has played a rather passive role in the Programme follow-up.

During the annual review meetings no comments have been made to changes in the budget in comparison with the PlanOp nor firm demands on improvement of information from Programme implementation etc. Some of these points were touched upon during the last annual meeting when no officer from Agricultural Division participated.

The Agricultural Division should also be able to back-stop SIDA-Bissau with experiences from rural development programmes elsewhere. Obviously no such back-stopping has taken place.

Finally, when the programme officer in charge of the zone-1 programme took up another position no successor from within the Division took over the responsbility but a short-term consultant is now handling the Programme.

The involvement of SLU in 1983 maybe explain to a certain degree this passive role of the Agricultural Division as this was expected to increase the management capacity. However, the Division can never free itself from the responsibility to control that the abovementioned responsibilities are correctly executed.

SLU

From mid 1983 SLU became more and more involved in the zone-1 Programme. It was not only for its technical competence SLU was hired but as well for provision of increased management capacity to SIDA-HQ. SLU has according to the Mission played a dynamic role in the following aspects:

- preparation of detailed work programmes and budget
- recruitment of short-term and longterm consultants
- introduction of a reporting system.

However, mainly due to unclear lines of authority and information SLU

- has not successfully introduced an evaluation system despite concrete measures (proposal)
- signed a very controversial consultancy contract with ORGUT (see 12.1 above)
- has not been able to speed up the recruitment process of experts. This may to some extent depend on the above mentioned protracted process of changing the SLU status vis à vis the Programme (see 12.1 above)

SIDA Bissau

It is obvious from the above figure that SIDA-Bissau has the key role in the external relations to the Programme. Almost all requests and information from the Programme is channeled through this office.

It can therefore execute a tight control and at the same time facilitate operations for the Programme through advice corrections of erroneous requests in time etc.

The Mission has found that without a proper information there is an obvious risk for tensions and misunderstandings between the Programme and SIDA controlled offices and organizations.

Up to May the relations between the Programme and SIDA-Bissau developed from bad to worse but the Mission was content to find that improvement occurred during the period up to September. The reason for the at times tense relations seems to be a matter of lack of control combined with lack of information. The Mission suggests that there are two main explanation for development of such a situation:

- Lack of initial information of basic SIDA rules and regulations to be followed by the Programme.
- Lack of capacity of the SIDA-Bissau office to execute proper control and to give acceptable service.

Due to the first deficiency the Programme developed a habit of executing e.g. unacceptably implemented purchases but with a short delivery time. When this was detected, not by SIDA-Bissau, but by a consultant, new routines were introduced considerably delaying the purchases. Obviously the Programme was not properly informed about the consequency e.g. that a SIDA order normally demands six months before delivery could be expected and that this calls for early ordering.

The role of the coordinator

The individual position of the coordinator plays, or rather could play, a key role in the relations between SIDA and the Programme. The background material on the functions of the Coordinator is somewhat confusing. According to the latest process verbal the position should be recruited by SIDA to safeguard proper use of the Swedish contributions i.e. he is described as a 'SIDA-man'. In the job description he is rather looked upon as a 'MDR-man'. It seems clear, however, that the incumbent to this position must possess the confidence of both parties to be able to function efficiently.

The Mission recommends in the first place that SIDA and Guinea-Bissau through the Interministerial Committee agree on the concrete role of the coordinator - responsibilities as well as authority.

The Mission further suggests that the Coordinator serve as an advisor to the Programme Director in all matters pertaining to implementation of the basic strategy and the separate projects and that he has an executive function in relation to the use of Swedish funds - recruitment, purchase etc. In the latter function he is responsible to adhere to the rules of SIDA i.e. he is supposed to facilitate the efficient use of the Swedish contribution without trying to "cheat" the system or bend the rules. In this latter respect he is a 'SIDA man', in all others he is a 'MDR man'. His main contribution should be to directly increase the management capacity of the Programme and indirectly lessen the administrative burden of SIDA.

The Mission recommends that the Agricultural Division plays a more active role than previously in the dialogue and e.g. clearly spells out SIDA's position regarding policy issues, demands information necessary to correctly analyze progress etc. If the Agricultural Division lacks resources a possible consultancy must be on long-term contract and the consultant should have the responsibility and authority to speak in the name of SIDA. This calls for a new type of relations between Agricultural Division and the consultant to make certain that the latter represents the interest of SIDA.

If SLU or another consultancy firm will aquire implementation responsibility of the Program, SIDA (Agricultural Division) still represents the aid experience and must consequently create a capacity to control that this firm performs at least according to a minimum standard of aid administration.

If a consultancy firm is procured it is important that the Programme is well informed about the reasons behind such an arrangement its advantages for the Programme, its extra costs etc. SIDA plays in this respect a very important communicating role and should also actively involve the Programme in the procurement and selection process.

With or without the above mentioned consultancy it is imperative to clearly define responsbilities and authorities for all parties involved in the Programme:

- Interministerial committe, SIDA-Stockholm (divided into LANT, EKON, INKÖP, PB, HÄLSA, UNDERV.), SIDA-Bissau SLU or consultancy firm, the Programme. The tasks include e.g. policy issues, purchase, accounting, payments recruitment, budgeting etc. There exist a discussion paper in Swedish prepared by SLU where this division of task responsibility is indicated. This paper should be elaborated, translated into portuguese and used as an important dicussion paper to decide on division of responsibility and authority.

The following concrete step are considered to solve the present situation caracterized by mistrust and many unsolved matters:

- Implement the quarterly meetings decided on the annual review meeting in February. SIDA-Bissau should use the first meeting to clearly elucidate the rules and regulations governing the administration of SIDA contributions.

- SIDA should improve and increase information regarding status of purchase orders, accounting payments and status of recruitment.

- Requests and answers to requests should be formalized and in written form. The Programme e.g. requested a transfer of funds for construction of Bula center from 1984 to 1985 in late December but had in September no formal answer to the request.

- The present holder of the Programme officer position is rather inexperienced. To avoid delays, misunderstandings etc, the Coordinator should spend one day per week working jointly with the Programme officer on all pending matters, until the formal written document (the PARR, the purchase order etc) is completed. No matter should be unattended for more than one week and no matter should remain in the SIDA office more than two weeks after arrival.

- The Programme Officer should spend as an average one full day per week viewing programme activities to gain a thorough knowledge of the Programme. In view of the complexity <u>and</u> importance of the Programme the officer must be able to devote necessary time to the Zone-1 Programme.

In connection with III.12 above certain measures of decentralized responsibilities with regard to purchase were suggested.

Finally, SIDA-HQ should realize the necessity to aquire resources for immediate translation into portuguese of contracts, reports and letters. SIDA is presently involved in development projects in Guinea-Bissau, Mocambique, Angola and Cabo Verde, all of them portuguese speaking. It is not possible to perform a smooth administration of these projects/programs using Swedish or English languages. Delays and misunderstandings and to a certain degree a feeling of lack of respect in the receiving country have developed.

2. Relations to other organizations

Water well school in Sao Domingo

The school exists since May -82. It is supported financially by DANIDA through UNICEF. The courses last 6-9 months and 10 teams of 4 members have been trained so far. Up to -84, 48 water-wells were constructed in the regions of S. Domingo and Bigene. Another 21 wells have been made in the second phase of the work, which aims at 62 water-points in all. The financing of the first phase included 950 000$ and another 650 000$ are in the budget for the second phase which runs up to -86.

The school work mostly with the traditional type of spade-dug pit well (as described for the Rural Water Project that is part of the Programme already). Some bore-holes have also been made with simple equipment which earlier used by the Buba Water Project in The South. A special type narrow bucket is being tried for such bore-holes.

An educational programme based on simple pictures is applied in the villages in the context of opening a well. The community pays a symbolic part of the costs for the material used and villagers help in the actual work of digging and casting the concrete rings. In a number of villages with new wells, the School has made systematic observations on their use. Those coming for water have been questioned about household size and the purpose of the water two days at a row with some months interval. The results have not been processed yet, but one interesting feature emerged already at a superficial inspection of the figures: The amount of water used per household member tends to increase with the new well.

The State Committee provides the School with a list of especially needy communities, but the work is carried out only where the villagers commit themselves to their part of a contract-like relationship. Other criteria applied are: 150 persons per well within 500 meters distance. A capacity of 25 liters/person/day. The bacteriological and chemical quality of the well-water is assessed. Drilled holes are only made south of the Cacheu-Farim river, for they need more maintenance from the project than do the hand-dug wells, which need very little in this respect.

The water-well School in S. Domingo has cooperation with the Village Handicraft Project in the same area.

The Village Handicraft Project

Adjacent to the Water-well School in S. Domingo there is a work-shop for metal handicraft making simple machinery that will be sold in the villages. The work started only recently and was designed with the guidance of a French consultancy firm (CIEPAC - Centre International pour l'Education Permante et l'Aménagement Concerté). Financial support has been obtained from Swissaid (650,000 French francs/year). We saw prototypes of a device for the extraction of palmoil with pressure and a simple forge with a hand-operated fan, both seeming very well adaptet to the village setting. Equipment for bee-keepers and for soap production are also being made.

In Mansoa we saw a small work-shop where sheet metal was recycled into buckets and basins. The two young men working there were against moving to Bula - something that had obviously been discussed.

IV PROJECT EVALUATIONS

IV.1. EXTENSION SERVICE

The extension organization plays the very key role in the Programme. It is through this organization that all support to the target population is channeled and problems from the target population are transfered back for solution to the technical departments/projects of the Programme.

1. Objectives and targets

The general objectives are to organize the peasantry and increase the agricultural production in Zone-1. More specifically this implies:

- transfer of technological knowledge adapted to the capacity and necessities of the peasants
- intermediation of credits
- support of and participation in the formation of peasant associations
- promotion and improvement of marketing of output and aquisition of input.

The extension organization should also bring problems, demands and ideas from the target population to the attention of the Programme Direction.

PlanOp does not give specific targets to be reached by the Extension service. However, the over-all target in the PlanOp for involvement of families in the Programme is also a target for the extension service. The table below shows the planned expansion.

	1983		1984		1985		1986	
Region	No of families	No of tabancas	No of families	No of tabancas	No of families	No of tabancas	No of families	No of tabancas
Cacheu	8500	260	10 000	310	11 500	350	13 000	400
Oio	700	20	4 200	130	5 300	170	6 500	200
TOTAL	9200	280	14 200	440	16 800	520	19 500	600

Table 1 Targets on Programme level.

The number of villages is only indicated for 1986. The number of villages for the remaining years is proportionally calculated.

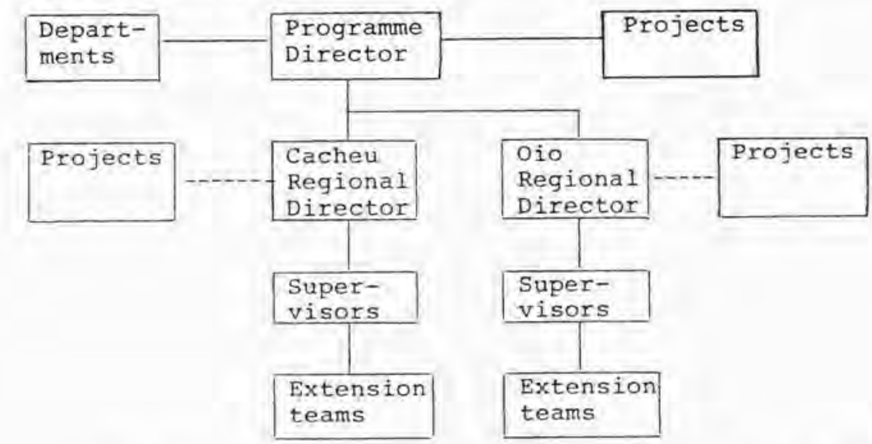
PlanOp expect the following development of fertilizer use:

	1984	1985	1986
Fertilizer (tons)	300	592	885

2. Organization

The extension service is organized for cooperation with other parts of the Programme both on zone level and on regional level. The project must develop close relations to especially the following projects/departments: experimentation, credit, animal health and traction, village forestry, water development, health and adult education.

The following figure shows the organization of the extension service:



One extension team should consist of one female and one male extension agent working together but with the former specialized in social development matters and the latter in production matters. An extension team should as a maximum cover eight pilot village areas. A pilot village area consists of one pilot village and none or many satelite villages.

3. Achievements

Basic philosophy

The programme inherited the fundamental philosophy underlying the organization and work methods of the extension service from the Bachil project i.e. when the Programme started in 1981 already four years of experience from this extension model in the Programme area was available. We find it valuable to summarize this basic starting point.

The approach regards rural extension as an informal, flexible educational system for development of man, based on programmed and coordinated activities.

The following twelwe points are considered basic for a correct functioning of such a system:

1. The integrated development takes place through modification of attitudes of the target population.
2. The approach must not be paternalistic. The peasants themselves have the responsibility for the development.
3. All activities of the extension agents should focus on problems raised by the target population.
4. The target is the whole family.
5. The extension agents should perform their tasks in the rural area.
6. The youth is a specific most important group to approach and support.
7. It is important that the programming of activities is performed in such as way that the peasant can obtain a complete vision of objectives and possibilities.
8. All plans should be the result of a joint work of the peasant family and the extension agent.
9. The extension agent should possess a profound and diversified technical knowledge of agriculture and for homeeconomics and in addition be specialized in knowledge transfer in a rural setting.
10. The extension activities should be performed through all type of organizations involved in rural development.
11. Rural extension should act as a link between the rural area and scientific research and political structures. Problems encountered in the rural areas should through the extension service reach the research and political levels for solution and decision.

12. Rural extension should be linked to a credit system.

The Mission has not been able to perform a detailed study of the actual influence of this basic model on the extension work performed. However, the Mission has found that:

- In principle this model govern the extensions work and is still according to the Programme Director the basic philosophy in all activities on village level.
- The following points in the "12 points-list" seem to be adhered to by the extension agents: 2,3.4.5.8.10 and 12.
- The Mission could find no evidence that the Programme had made the youth a specific important group to approach and support'.
- Regarding point 7 the Mission calls in question that even the extension agents have 'a complete vision of objectives and possibilities' let alone the target population.
- The most serious shortcoming of the extension department at present is the lack of 'a profound and diversified technical knowledge of agriculture' (point 9). The Mission will dwell on this subject later.
- The present level of knowledge of the extension agents as well as e.g. the experimentation department certainly also rules out the people linkage between the rural area and scientific research and political structures.
- A commendable effort to evaluate the work performed together with the target population has been made through annual review meeting.

Quantitative achievements

The table below shows the quantitative achievement for certain activities. The figures do not tell anything of the benefits for the target population but rather show the emphasis on activities by the extension agents.

	Budget 1983	Budget 1984	Actual 1984	Actual 1985
Number of villages in the programme	414	583 1)	440 2)	520 2)
Number of families	n.a.	24,356 1)	14,200 2)	16,800 2)
Number of associations	n.a.	71	n.a.	137
Demonstration fields (ha)	n.a.	43	53	9
Multiplication fields (ha)	9	51	41	44
Collective fields (ha)	n.a.	141	101	386
Demonstrations of sprayers	n.a.	70	43	n.a.
Support of warehouse construction	16	21	40	146
Construction of latrines	28	85	56	200
Demonstration of improved child-food (No of villages)	30	50	n.a	42
Courses in needlework (No of women)	–	168	20	850
Desinfection of houses	n.a.	1365	673	4300
Cleaning of wells	4	26	–	–

1) Mid May 1985
2) PlanOp

Table 2 Actual vs planned targets

Like most other quantitative information in the Programme it has been difficult to obtain comparable data for the different years. Unfortunately no informations exist regarding yield figures for the different fields and also the budget for 1985 lacks the obvious directing device that a budget with "production demand" rather than that "number of fields" have. In fact the present target system can show actual performance considerably above planned e.g. the sown area in ha is double the planned but still be disastrous e.g. if the total crop is lost due to drought etc.

According to the actual figures in mid - 1985 the Programme has already almost reached the target for the whole agreement period with regard to number of villages influenced by the extension activities.

The number of families is 25% above the planned figure for 1986. However, there is obviously a difference in definition between the actual figure shown i.e. number of families in the 583 villages influenced by the extension programme and the PlanOp figure. The latter probably shows families participating in activities of the Programme e.g. the credit Programme. Unfortunately no such analysis has been performed by the Project.

Training

The table below shows the actual training of extension agents and supervisors from the start of the Bachil project.

Course	Year	Admitted			Drop-outs			Extension			Superv.		Others	
		M	F	Total	M	F	Total	M	F	Total	M	F	M	F
I°	1977	9	-	9	3	-	3	2	-	2	4	-	-	-
II°	78/79	3	15	18	1	8	9	-	5	5	1	2	1	-
III°	1981	19	5	24	3	2	5	15	3	18	-	-	1	-
IV°	1982	4	11	15	-	5	5	4	6	10	-	-	-	-
V°	1983	21	7	28	7	4	11	11	3	14	-	-	3	-
Sub T		56	38	94	14	19	33	32	17	49	5	2	5	-
Total			94			33			49		7		5	

Table 3 Training statistics

The students admitted had normally a background of the Boé agricultural school (medium level) as regards the male students and approximately sixth grade as regards the female students.

The courses have comprised six months theory divided into the following subjects: General knowledge of rural development policy of Guinea Bissau, organization of MDR and the Programme, socio-economic and cultural knowledge, rural extension and work organization. In addition three months of practice together with the extention agents were performed.

4. **Analysis of performance**

The Mission had no opportunity to assess the competence of the staff. During the few meetings we attended, however, the extension teams seemed to have established open and frank working relations with the peasantry. However, these extension teams were considered the best in the Programme according to information during informal discussions.

In the summary we rated Extension Department performance as acceptable. The reasons behind this rating were:

- the build-up of an organization capable of reaching and influencing more than 20 000 families
- the creation of associations or pre-associations in 135 villages
- the seemingly well functioning working relations between the villages and extension teams
- the realization of yearly evaluation meetings between the Programme and representatives from the target population.

In view of the ambitious programme for the extension agents it is obvious that much is expected from them. In view of the rather short training and comparatively low initial education there are reasons to believe that these expectations are not and will not be met.

The Mission fears that many extension agents have a knowledge of practical agriculture that is inferior to the farmers they are supposed to help improving agricultural practice. This hard judgement is based on discussions with people responsible for analyzing the extension work and the obvious lack of practical agricultural training during the nine-month course at Bachil.

The Mission requested repeatedly to see the extension demonstration fields. Only one such field was shown - far away from Bula. The idea behind the demonstration plots is very good <u>provided</u> that they are carried through with improved management so that the extension agents can show the peasants that they, the extension agents, know how to obtain an improved yield. This is of great importance not only for their credibility as advisors but also for their self-confidence. The Mission therefore find it hard to understand why cultivation of demonstration fields seems to be exceptions instead of the rule.

In connection with the change from the Dutch supported Bachil project to the SIDA financed Zone-1 Programme the so-called Project PM of 1980 commented upon the basic philosophy summarized in 1.2 above. It was emphasized that the original approach should be further developed. The paper suggests that this could be achieved by improving the ability of the villages to choose and implement development activities i.e. to develop management competence. This calls for intensified training of the farmers, transfer of knowledge and resources etc. The Mission could find no information that the views in the 1980 Project PM (only available in Swedish?) had been neither transmitted to the Programme nor included in the present strategy.

A well functioning rural extension service demands continuous input of technological innovations and/or trials. The extension organization should also be able to refer actual problems back to an experimentation department. It seems as if neither new ideas are fed to the extension system nor problems are referred back for solution to the research arm of the Programme. There has been a change during the past year away from experimentation and trials towards production for the market (?) by the Experimentation Department.

A prerequisite for a successful extension programme in the production sphere is that the package offered and recommended will benefit the peasants (naturally also single inputs, practices etc). The Mission was not presented any cost/benefit calculations of items in the extension programme.

The basic philosophy stresses the need of flexibility. The Programme area comprises many different ethnic groups with probably wide differences in methods of work, the total production system etc. It is thus necessary to differentiate the strategy of intervention. The Mission did not get an impression that such flexible methods had been developed. On the other hand, the Programme seems to have considerable knowledge of the different etnic groups.

If we analyze the workload of extension teams and supervisors we find large variations. The expansion in Oio, for instance, was made at the price of a very low ratio of extension agents per village and supervisor per extension agents. The following data shows some extremes:

- least number of villages per extension team	6
- highest number of villages per extension team	57
- least number of habitants per extension team	750
- highest number of habitants per extension team	15 490
- average nbr of villages per ext. agent: Cacheu	12
- average nbr of villages per extension agent: Oio	14
- average nbr of extension agents per supervisor:	
Cacheu	5
Oio	10

In the following section IV.2, it will be shown that the credit repayment is especially low in the Oio region emphasizing the too rapid expansion in the area. Especially the supervisor situation is alarming - only two supervisors are available. An efficient extension service, qualitatively on a high level, demands continuous supervision on all levels - programme, region, sector, area. Supervision is not only control but also a means of back-stopping and inspiration.

Formation of viable associations is one important, maybe the most fundamental task for the extension teams. Originally they are formed around the solution of some collective probblems e.g. distribution of inputs, the production of seed, purchase and use of agricultural and/or small-industry equipment etc. As was mentioned earlier (III. 4) the leadership of these associations is often elected outside other organizations in the villages. However, the political structure - comite de base - must approve of the associations and the traditional leadership - homens grandes - often serve as advisers to the association leadership. There exist no formal statutes for the associations besides that the following funcionaries should be elected: President, deputy president, treasurer and secretary (cf IV.2 credit below). Also the admission to the association should be open for everybody.

The Programme should play an active role in improving the viability of the associations through mainly training of officials: secretaries, treasurers etc but also by advising on organizations of marketing, production, use of machinery etc.

The Programme should also soonest include representatives from the associations in the direct planning and implementation of Programme activities.

Considering the long time of influence the number of associations in Cacheu is astonishing low. Only slightly more than 20% - 31 out of 135 - of the pilot villages have a viable association. If only the old Programme area is counted i.e. excluding Sao Domingo and Begene sectors in the north which are totally lacking viable associations the percentage increase to a little above 40.

In Oio, on the other hand, the number of formed associations is high - 40 out of 93 pilot villages or about 45% - in spite of the short period of intervention. However, considering the repayment results (see next section) it is questionable if the associations could be considered viable already now. The Programme however, maintained that it is easier to organize the villages in Oio than in Cacheu due to the ethnic homogenity in Oio.

During the preceeding years consultancy studies of social-anthropologists have pointed to many concrete "grass-root level" problems in the extension organization. The latest - Tulle Schjervens study of femal extension agents - contained many observations and recommendations, some of them touched upon in this report. The Project Director informed that the latest report had been thoroughly analyzed and discussed. Most of the recommendations had already been implemented.

Finally, the choice of means of transport (motorbikes) has proved to be adequate but due to insufficient maintenance service also to be vulnerable. No alternatives (bicycles, horses, mules) seem to have been considered.

5. Recommendations

The recommendations will be grouped under three headings: Organization, strategy and others. We consider the first three recommendations under organization as the most crucial for the future of the whole Programme. They can be seen as recommendations away from a quantitative outlook towards a qualitative concern.

Organization

The extension agents are the key personnel of the Programme with a very ambitious work programme to fulfil. The training of the agents then becomes a crucial activity. In view of the closing of the Boé school the Mission strongly recommends a two year training course of all extension agents. This training must have a large component of practical training. This implies that the students on a demonstration farm connected to the new school in Bula should perform all parts of the agricultural work with methods and implements used or suggested to the used by the target population. Planning of upgrading training of present extension agents must start immediately. This upgrading should be of theoretical as well as (most important) practical character.

The Mission fully supports the proposal to establish a position as head of extension service. In order to continuously adapt the intervention strategy, to closely supervise the actual work performed and to establish smooth lines of communication with other parts of the Programme this position is most important. However, it is necessary to review the whole extension organization, especially at regional level. It is obvious that the coordinating tasks and the continuous contacts with political and administrative structures outside the Programme put so heavy demand on the time of the regional directors that they must be relieved from the direct responsibility to guide and control the extension teams.

In view of the experience from the expansion lately of the Programme and, most important, the lack of qualified extension agents the Mission recommends a consolidation of present activities and to present areas. Under no circumstances should an expansion to Biombo take place. The remaining two sectors of Oio should be included only when full teams are established in present areas and full teams can formed for new areas.

The supervising situtation in Oio is unacceptable. At least two new supervisors must be trained or as an intermediate step, the present supervisors must be more evenly distributed between the two regions. The Mission recommends that training programmes immediately are planned and executed for new supervisors in order to cover not only the present deficit but also to decrease the number of extension teams per supervisor.

The cooperation between Experimentation and extension service must improve. The experimentation department should actually help extension agents to establish demonstration fields and later supervise these fields. Also the extension agents should refer actual problems in the rural areas to the experiementation department for solution i.e. it should be a two-way-communication between the departments.

The Mission recommends that especially new extension agents should concentrate on a few tasks and perform these well instead of trying to achieve a lot of things at the same time. A list of priority should be worked out together with the supervisor.

The Strategy

The Programme should immediately start collecting in a systematized way all available experience within the organization of response to the actual strategy of intervention by the different ethnic groups. The social anthropologist should be responsible for this data collection and prepare a document that could serve as a base for a seminar aiming at formulating (different) strategies for Programme intervention in the different ethnic societies.

The suggestions in the "Project PM" from 1980, to consciously develop the ability of the villages to independently choose and implement development activities, should be shaped into concrete plans of action. This demands that the extension organization continuously analyzes and tries to understand the problems of the villages and together with the peasants tries technical and other solutions often unknown to the peasants but which the Programme can suggest. This approach gives according to the Mission a somewhat more offensive feature to the extension strategy than the one presently being pursued.

In the Bachil-project the first main approach to a village took the form of a socio-economic survey. The Mission has not been able to find a corresponding method in the Zone-1 Programme. We find it extremely useful for the extension team to perform such studies together with the habitants in the areas. These studies will give the extension agents a necessary base for understanding problems and for programming of intervention.

The Mission believes that one of the most important tasks to begin with in the village is the foundation of an association. The Mission also suggests that standard statutes for the associations should be introduced. These should be very simple and preferably not more than one page.

Others

All innovations suggested by the extension teams should be carefully tested before they are introduced to the target population. Results from these tests together with cost benefit calculations should be the very base of the extension team's arguments.

The budget targets for the extension activities should be more quality oriented. Instead of only indicate that e.g. 15 ha of demonstration fields should be sown, the target should also state the expected yield from these fields.

With a new set of targets it should be possible to better evaluate the performance of the extension teams and introduce a system of premiums for good performance.

The present teaching material is well prepared but in view of the extensive material the teachers should give priority to teaching of the methods and means most used.

A one-week course in driving and maintenance of motorbikes, should be designed and be compulsory for all extension staff.

Finally, the Mission considers the two consultancies planned for 1985 regarding village associations and support of rural extension service as extremly important and they should be executed soonest.

Weekly meeting
Extension Team - Pilot Village Inhabitants

Latrine

Youth brigade at work

Traditional cottonspinning

IV.2. THE CREDIT PROGRAMME

1. Objectives and targets

The production advice by the extension agents involve the use of certain inputs and tools. The credit programme aims at aquiring and distributing these inputs and tools on credit to the villages. Two types of credit are foreseen: seasonal credit (seed, fertilizer, handtools) and medium terms credit - 3 years - (implements for animal traction etc). The targets for the plan period in PlanOp are:

	1984	1985	1986
Seed	5,460	6,665	7,670
Fertilizer	1,680	3,312	4,950
Pesticides	1,260	2,900	6,300
Handtools	1,800	1,300	900
Sundry	300	400	500
Total seasonal credit	10,500	14,577	20,320
Implements for animal traction	1 300	1 600	1 900
Sprayers	200	400	800
Sundry	500	600	700
Total medium term credit	2 000	2 600	3 400

The expected repayment rate of seasonal credit was 90% and the total repayment 95% including interest.

2. Organization

The credit system is based on collective credit to the pilot villages. The system presupposes the formation of an association with elected chairman, secretary and cashier. A village can only enter the credit system the year after extension activities started in the village and a secretary was trained by the Programme. The pilot village is responsible for credit applications, distribution and recollection of credit also to/in the satelite villages. There are no formal demands from the Programme on statutes of the associations besides election of the above mentioned functionaries.

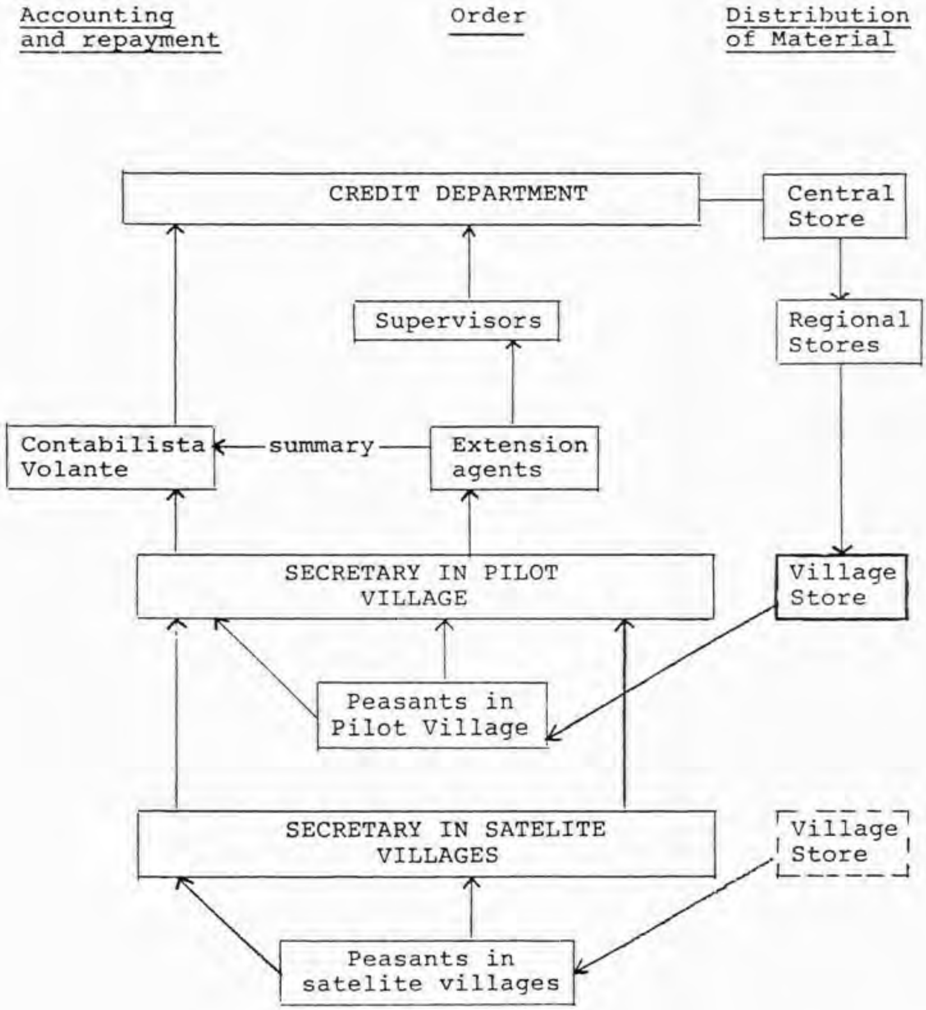


Figure 1 Routines of the credit programme shows in flow diagrams

The Credit Department is responsible for the over-all admininistration and control of purchase, storage and distribution of material for the credit programme and of the credits to the villages. On the grassroot level the contabilista volante and the extension agents nowdays have a joint responsibility for the granted credits. The distribution is executed and controlled by both while the technical part of the recollection is handled by the contabilista volante. Figure 1 shows the flow of order and material.

3. Achievements

The programme has developed a system of acceptable sophistication to allow for information, control and execution of the credit system. Before 1984 the routines and forms for the contabilista volantes were inadequate and for 1983 an estimated loss of 900 contos (35% of total credit) was incurred. New forms closed the swindle loophole and after that only 60 contos (0,5% of total credit) seems to have been lost. This loss was quickly discovered by the system and the contabilista punished.

The programme is operating 16 stores in 10 sectors of the Zone 1. However, only five of these are safe and in good condition totally 915m^2. Recuperation and improvement cost of another six has been estimated at 5 300 contos.

The value of actually granted credits in comparison with the targets in plan of operation is somewhat difficult to establish due to the considerable devaluation of the peso. If we use the calculation rate suggested in the Budget comparison report for 1984 (seed is not affected in our calculations) we arrive at the following figures (SEK):

	Plan of Op	Budget 1984	Actual 1984
Seed	5,460	5,460	5,171
Fertilizer	3,360	3,360	2,436
Material	6,720	10,720	4,876
	15,540	19,540	12,483

This implies a 80% target fulfilment of the Plan of Operation and 64% of the budget.

However, it seems as if the prices charged to the peasants has on a whole been prices set before the devaluation of the peso. If this is the case the following table is valid:

	Plan of Op	Budget 1984	Actual 1984
Seed	5,460	5,460	5,171
Fertilizer	1,680	1,680	2,436
Material	3,360	5,360	4,876
	10,520	12,500	12,483

This implies a 100% target fulfilment of the budget. It should be observed that the Plan of Operation as well as the budget foresees sale of pesticides with a value of 1 260 contos (included in material above) which actually did not take place. The reason for excluding pesticides from the Programme is that the government has decided to distribute them free of charge through other organizations.

The distribution of inputs in physical terms has developed as follows during the last four years:

	1982	1983	1984	1985
Seed (ton)	81,1	44,2	256,3	172
Fertilizer (ton)	120	71,1	280,9	196
Cutlasses	2,732	5,044	13,385	16,222
Hoes	5,327	8,270	8,641	6,264
Sickles	-	7,000	1,939	-
Scythes	265	3,239	1,431	-
Rakes	-	355	177	2,473
Zinc sheets	-	4,831	2,444	6,980

The development of the medium term credit has been the following (main items):

	1983	1984	1985
Crushers	33	12	-
Scales	24	21	79
Sprayers	64	58	-
Sewing machines	-	10	1
Metal bars	-	218	-
Files	-	60	277
Hammers	-	29	52
Bellows	-	13	35
Oxcarts	46	32	44
Donkey carts	-	40	99
Multicultivator	49	39	-
Total value (contos)	578	1,218	5,422
Repayment as of September (contos)	439	747	2,431
Repayment rate	76%	65%	45%

During the years the Programme has trained the following number of functionaries:

	Contabilistas volantes		Secretaries in villages	
	Basic training	Improved training	Basic training	Improved training
1982	5		65 (Cacheu)	
1983	8			65
1984		12	36 (Oio)	
1985 (plan)		12	99	99

During 1984/85 the Programme also involved itself in the marketing process. The Programme delivered consumer goods - soap, cloth to private traders in the zone on credit to be exchanged on barter for millet and beans. Up to September the project distributed consumer goods of a value of 3 400 contos and received repayment in kind of 78% of the credit granted.

4. Analysis of performance

The basic material was presented to the Mission in a non-analytical and rather non-perspicuous way. There is also a considerable discrepancy between earlier presented figures e.g. in semi-annual reports and the figures given to the mission. The Programme, however, maintained that these last presented figures are the correct ones.

The following table shows the total credit (in contos) and repayment rate for different sectors of the Programme area.

Table 1 Total seasonal credit and repayments during 1982-1985

Sector	Total credit				Repayment						
	1982	1983	1984	1985 1)	1982 Contos	%	1983 Contos	%	1984 Contos	%	% debt of total credit
Cacheu	397	467	467	992	371	93	391	84	363	78	15%
Canchungo	494	625	697	692	393	80	322	52	457	66	35%
Caió	238	362	734	668	188	79	354	98	515	70	21%
Bula	1,305	929	2,148	1,063	1,140	87	512	55	1255	58	34%
Unspecified	-	94	538		-		94	100	394	70	23%
Begene	-	-	2,664	766	-	-	-		1,893	71	29%
Sao Domingo	-	-	534	620	-		-		328	61	39%
Bissorá	-	-	2,738	2,789	-	-	-		1,939	70	30%
Mansoa	-	-	1,111	1,059	-		-		739	66	34%
Nhacra	-	-	861	1,113	-		-		606	70	30%
TOTAL	2,434	2,477	12,492	9,762	2,092	86	1673	68	8489	68	30%

1) For the Cacheu region value of seed not included

The above figures were valid as of September i.e. according to credit rules at a time when all credits should have been paid back in full except 1985 credit.

The following observations can be made:

- During the "best" year, 1982, 86% of total credit has been repaid. This is about 10% below the target (one year after granting the credit) in PlanOp.
- The repayment rate deteriorates rapidly from 1982.

- In the "old" Programme area it is especially the sectors around the main town of Canchungo and the Programme center (Sic!) in Bula which shows worst repayment rate.

- The recuperation rates in the new areas in the Oio province were alarmingly low i.e. only around 50% up to the end of April. However, up to September a considerable improvement took place although 30% debt is still due but not paid.

Table 2 shows the credit amount and repayment rate for the seasonal credit divided in to three main groups. The material is supposed to be sold on cash basis which in practice means that the villages obtain the material on credit for onward cash sales to peasants.

Table 2 Total credit (in conto) and repayment rate divided on main groups of input

Year	Region	Seed			Fertilizer			Material			Total		
		Credit	Repayment	%	Credit	Repayment	%	Credit	Repayment	%	Credit	Repayment	%
1982	Cacheu	455	342	75	737	634	86	1,242	1,116	90	2,434	2,092	86
	Oio	-	-		-	-		-	-		-	-	
1983	Cacheu	423	114	27	321	184	57	1,733	1,375	79	2,477	1,673	68
	Oio	-	-	-	-	-	-	-	-	-	-	-	
1984	Cacheu	2,898	1,604	55	1,722	985	57	3,159	2,597	82	7,779	5186	67
	Oio	2,273	1,383	61	718	304	42	1,722	1,587		4,713	3,274	69
TOTAL		6,049	3,443	57	3,498	2,107	60	7,856	6,675	85	17,403	12,225	70

The following observations can be made:

- Both seed and fertilizer shows a very low rate of repayment.

- The seed is repaid in kind (+10%) and after bad crop year a low repayment rate could be expected. 1983 was a bad year but 1984 on the other hand was a good year.

- The material should be sold on a cash basis and there should be no expectancy of defaults. The 15% loss(?) is therefore serious.

The Programme has not performed any studies or gathered data in a systematic way of the credit programs below the village level. A small investigation of four pilot villages performed on request of the evaluation team gave the following information:

TABLE 3. CREDIT PROGRAMME LUENCE 196

Area		Number of villages	Number of families influenced by the programme	Credit Programme: No of villages	No of associations	Total credit contos	Repayment rate: Conto	%	Average credit per family	Years in credit programme
Cacheu			(12 811)	(62)		(7169)	(4785)	(67%)	(560)	
Cacheu	I	8 (+11)	367	7	4	203	(148)	73%	553	3
	II	8 (+9)	523	8		265	(215)	81%	507	3
Canchungo	III	5 (+3)	781	5		212	(168)	79%	271	3
	IV	8 (+9)	884	6	+IX 12	264	(176)	67%	299	3
Caió	V	8 +	722	6	9	268	(192)	72%	371	3 or more
	VI	4 (+2)	449	5		466	(306)	66%	1038	3
Bula	VII	8 (+16)	482	8		717	(381)	53%	1488	3
	VIII	8 (+25)	418	5	+ X 6	560	(322)	58%	1340	3
Canchungo	IX	8 (+49)	1 980	6		221	(111)	50%	112	3
Bula	X	8 (+12)	397	6		798	(543)	68%	2010	3
Begegne	XI	8 (+14)	707							
	XII	7 (+14)	730			2 662	(1894)	71%	797	1
	XIII	8 (+15)	916	n.a						
	XIV	8 (+23)	986							
Sao Domingo	XV	8	317							
	XVI	8	128			533	(329)	62%	108	1
	XVII	8	1 333	n.a						
	XVIII	7	691							
Oio			(11 183)	(73)		(4685)			(419)	
Bissora	I	8 (+42)	1 248	8		1082	(600)	55%	867	1
	II	8 (+13)	508	6		325	(242)	75%	640	1
	III	8 (+19)	944	5	22	385	(135)	35%	408	1
	IV	6 (+15)	1 050	6		506	(310)	61%	482	1
	V	6 (+22)	1 581	6		413	(94)	23%	261	1
	VI	8	699	-		-	-	-	-	-
	VII	3 (+12)	969	-		-	-	-	-	-
Mansoa	VIII	6 (+3)	276	4		215	(130)	60%	779	1
	IX	7 (+8)	308	8	14	382	(190)	50%	1240	1
	X	7 (+3)	587	7		210	(142)	68%	358	1
	XI	8 (+13)	757	7		307	(105)	34%	406	1
Ncacia	XII	8	1 129	8		562	(341)	61%	498	1
	XIII	4 (+3)	371	8 (?)	4	298	(107)	36%	803	1
	XIV	6	756	-		-	-	-	-	-
		228 + (355)	23 994	n.a	71	11 854	7181	61%	494	n.a.

Village	Ethnicity	Number of families[1]	Average family size	No of association members	Average credit/ member
Cosseba	Balanta/ Mané	41	5,5	84	396 pesos
Nhany	Mandinga	187	7,0	310	575 pesos
Pete	Macanha/ Balanta/ Pepel	85	6,7	127	853 pesos
Ponta Pedra	Balanta/ Manchaco	41	7,6	81	790 pesos

1) in area of influence i.e. pilot village plus satelite villages.

It seems as if all families are members of the association and also that both husband and wife participate. The average credit per family varies between 800 pesos and more than 1500 pesos.

Table 3 shows in summary the influence of the credit programme during 1984 based on available data. Where information is lacking n.a. indicates that data are not available. The average credit amount per family is based on the above shown tendency that almost all families participate in the credit programme in the areas of influence. There is a discrepancy between the repayment rate in this table compared to table 2. The reason is that table 4 shows the situation in May 1985.

The following observations can be made:

- If we exclude the Begene and Sao Domingo areas where we lack detailed data of number of participating villages more than 80% of the pilot village areas participate in the credit programme.

- The number of constituted associations is far below the number of villages which receive credit i.e. 71 associations and 135 villages with credit.

- If we compare actual achievement in training of village secretaries - a prerequisite for obtaining credit - we find that only 36 secretaries were trained for Oio in 1984 while 73 i.e. more than double the number of villages obtained credit.

The following small table shows the etnic differences in repayment rate. It should be observed that many areas are inhabited by more than one ethnic group and that the table indicates the dominating group in the pilot villages.

Repayment rate	Dominating etnic group				Total
	Balanta	Manjaco	Mandinga	Mixed (Sao Domingo Begene)	
80 - 100%	-	1	-	-	1
60 - 79%	6	5	-	2	13
40 - 59%	3	1	1	-	5
<40%	4	-	-	-	4
	13	7	1	2	23

There is obviously no direct link between high/low repayment rate and etnic dominance of a certain area.

5. Problems met and recommendations of improvement

Low repayment rate

It has been difficult to grasp the real repayment rate in the semi-annual reports as no discrimination of credit and repayment of the different years was made. In the material presented to the Mission it is, however, possible to see that the over-all repayment rate is considerably below the 10% bad debt prognosis in the Plan of Operation. There seem to be some external reasons for this:

- "urban habits" have developed around the centers of Canchungo and Bula.
- active involvment of political structures in e.g. Bula to waive repayment of seed credit.
- bad crop year in 1983 made seed repayment in kind difficult.

On the other hand, certain internal circumstances also contributed to this situation:

- acceptance of villages in the credit programme lacking an adequate village association.

- invalidation of the basic rule of granting credit to village only after a secretary has received training. It is certainly the cause of the alarmingly low repayment rates in Oio where only half of the villages in the programme has a trained secretary.

- up to now, no punishment of defaulting villages has taken place although the Plan of Operation indicates exclusion of villages with more than 10% overdue debt. If this rule had been used 1985 very few villages had been eligible for credit.

- it is obvious that the extension agents play an important role in sensibilizing the population vis à vis the credit program. In certain areas especially in Oio the number of extension agents and (even more) supervisors is lower than planned when starting activities in an area.

The Mission would like to emphasize that a credit system must be operated in a just way i.e. certain individuals should not tend to regard credit as grants year after year while the majority fulfils their obligations. In the long run this thwarts the whole credit programme with increasing number of defaulters.

The Mission therefore recommends that:

- rules for exclusion of village from the credit programme should be executed soonest. Maybe it will be difficult to use the above mentioned 10% limit immediately but it should be the ultimate target.

- a small premium should be introduced to villages which show a 100% repayment rate before the due date.

- extension agents should be told to play an active sensibilizing role not only in the process of granting credits but also in repayment of the loans.

- migration was one reason mentioned for the failure to obtain full repayment of the 'cash' sale of material. This implies that certain material remains in the store of the village associations and the buyer does not show up to collect his material. This remaining material could be deducted annually from the order of next year implying that the villages will have an opening balance when starting the sale for next season which together with new deliveries will cover that season's demand.

The Mission further recommends that:

- the basic rule of not admitting villages to the credit programme until an association is founded and a secretary trained <u>must</u> be followed. It is more important that the development process is consolidated in a viable way than that the Programme can show an ever-extended expansion of the influence area.

- The Mission understands that the training of secretaries is problematic. The turnover of trained secretaries is very high implying that the situation is worse than shown above. At present no one knows how many trained secretaries are actually keeping that position in the associations. Migration was mentioned as the main reason for the high turnover.

  It is important that the Programme immediately investigates the actual situation regarding trained secretaries. It is also necessary that the Programme is immediately informed about changes on this position in order to plan for training of a new incumbent.

- also seed should be repaid in full if no external calamities have accured. It is important that all political structures are aware of this. During colonial time free seed was obviously a rule in certain areas. To adhere to such a rule is basically paternalistic and seen on a national scale a very costly alternative.

<u>Supply of inputs</u>

The fertilizer is supplied by FAO priced by MDR and distributed at a highly subsidized price the peasants pay less than 1/3 of the real price. Normally the deliveries take place in time for distribution. However, in 1985 less than 30% of the NPK order was received by the Programme. The seed is supplied mostly from the repayment of old credits but also from DEPA. The quantities needed are normally distributed in time.

The material for both seasonal and medium term credit is mostly purchased outside Guinea-Bissau. It is thus affected by the already discussed slow process of purchase. During the visits to villages the Mission could establish that obviously the single most serious problem for credit expansion and also for many extension agents position was the lack at material ordered. Without knowing of the protracted purchase process many agents had promised delivery of material that did not arrive in time for the campaign.

The time-table for the ordering of material for the 1985 campaign was:

14/9 - 1984	The Credit Department ordered
21/11 - 1984	The coordinator formalized the order to SIDA-Bissau
31/1 1985	SIDA-Bissau forwarded the order to Stockholm

With a normal delivery time of six months it is obvious that no material will reach the peasants in time for planting this year.

The Mission recommends that:

- a standardization of certain implements e.g. hoes, cutlasses etc is accepted by SIDA so that purchase of these items can be quickly executed
- that extension agents are informed about probable delivery time of material not to give over-optimistic information to the villages
- the fertilizer price is adjusted to a realistic level so that the farmers can evaluate the true benefit of using fertilizer
- the Programme performs a study on the need of transport capacity and the availability of this capacity. Besided material the distribution of inputs has increased from 200 tons in 1982 to 750 tons in 1985. There is an obvious risk that the transport capacity can be a bottle neck for the expansion of the credit programme in the near future
- decision is taken regarding improvement of available stores

System design

Up to 1984 the credit system suffered from inadequate forms, control etc. During that period extensive disappearance of funds took place and the Programme has presented full evidence of the fraud to competent authorities. However, no measures have so far been taken by these authorities. It is always tempting to test if a system allow for irregularities. It is therefore important to continously control and improve the system. The Mission also supports the rather harsh action taken lately to handover also a rather small (20 contos) swindle for policeinvestigation.

This example could counteract future trials to "cheat the system".

The credit system in its present form has been in operation for about four years. The Mission now finds it important to

- make an in-depth study of the impact of the credit system i.e. to go below the village level and investigate on the peasant level how the credit is distributed, how it has affected the incomes etc.
- develop standard statutes for the village associations. (cf IV.1)

IV.3. TRAINING DEPARTMENT

1. Objectives

No objectives are formulated but definition of functions gives some idea of the aim.

- establish the most approriate methods for theoretical and practical training of programme personnel
- define norms for evaluation of training activities
- plan, coordinate and control all the courses held for training of Programme personnel
- safe-guard that teaching material is available and also that this material is continuously developed
- organize and administrate all training centers of the Programme.

2. Achievements

The achievements are more detailed discussed in other sections of this part of the report e.g IV.1, IV. 6 etc. The following is a summary of achievements:

	1983	1984		Target
	Actual	PlanOp	Actual	Fulfilment
Extension agents (basic course)	17	20	-	0%
Extension agents (follow-up course)	37	-	49	n.a.
Forestry extension agents	-	6	-	0%
Supervisors	2	4	-	0%
Animal health assistants	12	5	9	180%
Animal traction demonstrators	2	5	3	60%

Besides certain follow-up courses for extension agents the Department has not been involved in any training activities. The livestock training has been performed by animal health and animal traction Department.

Construction work started on the new school in Bula which will be completed in the beginning of 1986. The Bachil school will then be transformed into a peasant training center.

3. Analysis

The Training Department has been working at a very low capacity. The main reason has been the lack of staff especially head of the Department. It was not until the first visit of the Mission that a job description was finally approved for this important position. The absence of the head of Department also implied late requisition of material and the course now starting for female extensions agents will suffer from lack of basic teaching material.

Besides the lack of coordinating staff the department is also experiencing problems in hiring teachers and to implement a teaching schedules that can be adhered to.

With the closing of the Boé-school for medium level training in agriculture, the basic training level of students admitted to Bachil (later Bula) will be considerably lower than before.

The theoretical part of the extension training seems to be based on well prepared material. The practical training on the other hand seems to be very adhoc and weak.

4. Recommendations

The Mission recognizes the Training Department as being a key department for the future smooth functioning of the whole Programme. It is then imperative that SIDA makes special efforts to quickly fill the position as head and pedagog of the Department.

In view of the closing of the Boé school the new Bula school should assume greater responsibilities than before also for technical training of the extension agents. The above recommended two-year course will facilitate this. In view of the infrastructural facilities in Bula Guinea-Bissau should consider the possibilities to make this school a national training center of extension agents for different fields (agro - forestry - animal), animadores (for adult education) etc. This, however, calls for a considerable input of local resources in the form of teachers and teaching material.

The Mission strongly emphasizes the need to improve the practical training of especially the extension agents. This calls among other things also for development of an adequate demonstration farm close to the school in Bula.

IV.4. EXPERIMENTATION DEPARTMENT

1. Objectives

In the plan of operation for 1984-86 the objectives for this project are well defined and explained. It is clearly stated that crop trial activities shall be strengthened and enlarged in order to solve agro-technical problems and to support other projects within the program. Furthermore, the project shall establish ways of communications with the extension service which will enable a smooth and efficient dissemination of the results obtained.

The activities shall be carried out at the granjas at Cacheu, Canchungo, Caió and Sao Domingo with a concentration at Cacheu, the aim beeing to turn this granja into a centre for crop trials and seed production.

At the granjas the following activities shall take place:

a) Trials which will make it possible to optimize the production of rice, ground nuts, manioc, beans, millet, sorghum and vegetables. For each one these crops the trials shall deal with varities, rate of fertilization, seed rate and cultivation practices.

b) Multiplication of improved seed of rice and ground nuts.

c) Multiplication of fruit trees such as citrus, banana, paw-paw, mango and cola-nut (coleira).

Apart from activities carried out at the granjas the project shall also, among other things, carry out follow-ups in trials implemented by DHAS (Departamento de Hidráulica Agrícola e Solos), fertility section, and supervise seed multiplication fields with associations and with farmers.

2. Achievements

Trials

During the four-year period 1980-83 a number of trials were carried out at the Cacheu granja. The results of these trials are well documented in annual reports from the projects. From 1984 and onwards no trials are carried out at the granja.

Other activities

In 1984, according to the half-year reports of the program, the following production took place at the granjas:

- Multiplication of rice seed, paddy rice 3,4 ha (planned 4,0 ha) dry-land rice 1,0 ha (planned 1,0 ha)
- Multiplication of groundnut seed 1,0 ha (planned 1,0 ha)
- Nurseries 1,235 seedlings (planned 2000)

Apart from this, field for production of manioc, 0,37 ha, was established. The total area under cultivation is 11 ha, some of which is used as a citrus orchard. Some production of other fruits and vegetables also takes place. When visiting the Cacheu granja the mission could not get hold of a written report but the following production figures for the last year were given by the person in charge of the project:

		Value, PS
Paddy rice	3400 kg	49 000
Dry-land rice	660 kg	9 570
Ground-nuts	640	9 920
Irish potatoes	510	5 100
Citrustrees (Oranges, lemons)	553	28 330

The total value of the production from the Cacheu and the Sao Domingo granjas amounted to 113 110 PS and from Canchungo granjas to 8 910 PS, making a total for three granjas of 122 020 PS.

3. Analysis

Trials

The value and importance of crop trials as a necessary basis for extension work among farmers is widely recognized. Only by trials designed in cooperation with the extension service and carefully implemented, will it be possible for extension staff to get reliable and locally well adapted answers to questions and problems which they encounter in the field and in their day-to-day work with the farmers.

It is important that crop trials are carried out in the geographic area where the results are to be implemented, The reason for this is of course that climate, soils etc do vary a lot and so results from one part of the country cannot readily be transferred and used in other regions.

Considering the above the mission is very much concerned about the fact that crop trials have been excluded from the project. Instead of turning the Cacheu Granja into a centre for crop trials, as is stated as one objective in the 1984-86 plan of operation, all activities in this field were in fact discontinued from the beginning of that very period.

Production and other activities in the granjas

The mission do recognize that a considerable work has been done at the granjas in the initial stage with clearing of land, building fences etc. Even so, considering that 45 labourers are employed, apart from personnel with technical training in agricultures from extension agents (extensionistas) and upwards, the output from the granjas is far from satisfactory. As mentioned above, in 1984, three granjas produced seeds, seedlings etc to a value of 122 000 PS only - less than 3 000 pesos/worker i.e. covering less than 1,5 month's salary. Slightly more than 500 seedlings were distributed to villages which makes less than three seedlings per pilot village on the average, not to mention the satelite villages. There is little evidence that the output for 1985 will differ to any great extent from that of 1985 although in the Plan of Operation for 1985 the output from the granjas is estimated at 700 000 PS.

From what the mission saw at visits to the Cacheu and the Sao Domingo Granjas the work carried out is not up to the standards from the technical point of view. This is quite serious as the work done at the granjas should set good examples for farmers and extension agents.

As for production that is merely for sale of fruits, vegetables, potatoes etc, it is the opinion of the mission that this kind of production causes the project tremendous costs as compared to very modest revenues and, most important, does in no way benefit the target group of the programme - the rural families. This implies that the granjas at Canchungo and Sao Domingo have no function whatsoever to fill within the project but merely contribute to indefensible costs.

4. Recommendations

- Crop trials should be reintroduced in the project and they should be given the magnitude originally stated in the plan of operation.

- In view of the present personnel resource situation the originally planned position as agronomist to be recruited by SIDA should soonest be reintroduced.

- All trials should be planned in close cooperation with the extension service. Close cooperation should also be establised with the DEPA (Departamento de Esperimentacao Agricola) in order to, as far as possible, have the activities in Zone I to fit into the national program for crop trials. DEPA does not operate any trials in Zone I, its activities beeing concentrated to the experimentation stations at Contuboel and Cabuxangue. The department is, however, willing to assist in the planning and also in the interpretation of trials also in other parts of the country, in this case provided that the project itself takes the responsibility for the actual implementation.

- The project should also follow research in Senegal and Sierra Leone and, when possible, try to adapt promising varieties in the zone-1.

The Mission recommends that, as far as production is concerned:

- the project concentrate on activities like multiplication of seeds, seedlings and other plant material that can be distributed/sold to the villages. Consequently other production as mentioned above should be discontinued

- all activities are concentrated to the Cacheu Granja

- the Canchungo and Sao Domingo granjas should be excluded from the project

- that the project takes a close look at the labour input at the granjas as compared to activities/production with the aim of cutting down labour costs and improving labour efficiency.

Nursery of fruit trees

Multiplication with pampam (dryland rice)

Planting of multiplication
field of saltwater rice

IV.5. LAND RECLAMATION

1. Objectives

The objective of the project is:

- to increase the production of paddy rice (arroz de bolanha salgada) by recuperating areas that were formerly used for rice production or by opening up new arable land.
- to study the process of controlling the water.
- to help farmers in need of more land.
- to collect rainfall data, not only for the bolanha areas, but for a number of places covering the entire zone I.

2. Achievements

The data presented by the Project has been difficult to understand and correctly summarize. The table below should be looked upon as a first approximation.

Year of recuperation	Number of bolanhas	Number of ha	Ploughed to day			
			Yes		No	
			Number	Ha	No	Ha
1981	9	792	3	130	4	662
1982	5	387+ 1080 1)	-	-	4	387
1983	10	1950	10	1930 2)	1	20
1984	3	440	2	150	1	290
TOTAL	26	4649	15	2210	10	1359

1) The large Joao Landin bolanha met with great problems (see below) and work stopped
2) Only partially ploughed

This table shows figures which are considerably lower in 1984 than the figures in the semi-annual report. We have not included bolanhas recuperated earlier but repaired only in 1984.

Rainfall data have so far been collected at Cacheu, Canchungo and Bula.

3. Analysis

It is the opinion of the Mission that the project as a whole has a realistic and relevant approach towards its rather complicated task. The project does not get involved in any recuperation of land unless the farmers themselves ask for it and, most important, the farmers themselves have to participate in the work. As far as possible the use of heavy machinery is avoided. This means that the rate of recuperation will be slower but it will ensure a greater responsibility and involvement from the farmers. There are many examples from the southern part of the country where big areas have been recuperated using heavy machinery - and the bolanhas are now abandoned by the farmers.

However, the bolanha system is at present a system in disequilibrium. The main reason is the climatic change - - shorter rainy season than before and less rain, a decrease of about 500 mm/year. This creates a very difficult struggle against the salt penetration. In many bolanhas of to-day you can find areas which are de facto salt deposits. In view of this and the fact that the present economic system does not favour rice production it is not surprising that the farmers are growing e.g. sorghum instead of rice.

Besides the technical problems the social reality also prevents the recuperated bolanhas to be used. This could to a considerable degree be attributed to the traditional rights of land where migrated families still could claim the land.

It is also difficult to mobilize the necessary laborpower and to agree on the most appropriate time to close the areas. The mobilization is hampered by lack of food - the payment for the work - and at times by the abuse of palmwine.

Technically, another main problem is the very forceful tide demanding fast and concentrated work during a limited timespan. If this work is not properly done the dykes break and it is necessary to make another try. This happens frequently.

As for rainfall data the Mission had difficulties in getting hold of such data. No comprehensive report on this important field has so far been compiled. A number of rain gauges have been procured but not all of them are in use.

As the rainfall situation is of utmost importance for the long run planning of crop production and especially for judging the need for locally designed crop trials the situation in this field is most unsatisfactory.

4. Recommendations

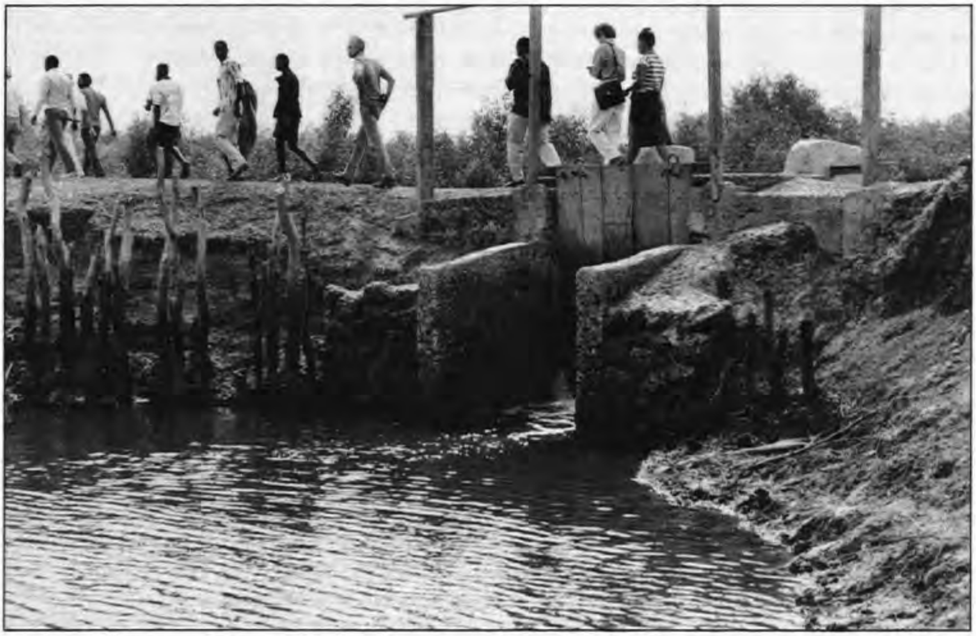
The Mission supports the Programme's proposal to presently concentrate the efforts on initiating production on already recuperated bolanhas.

The Mission also supports the proposal from the consultancy group for Joao Landim that the whole bolanha system should be analyzed from economic, social and technical viewpoints. Based on this analysis an integrated approach to the system should then be tested on a small scale.

As for activities in the field of collecting rainfall data the Mission strongly recommends that:

- a comprehensive report on all data so far available is compiled
- this report is updated yearly at the end of the rainy season
- all raingauges are put in use forthwith and that collection of data is supervised in order to ensure their reliability.

Manual construction of embankment



Modern component of traditional structure:
the closing gate

IV.6. ANIMAL HEALTH AND ANIMAL TRACTION

This part will be only briefly discussed as a separate consultancy was performed only days before the Mission started the first visit.

1. Objectives

Animal health

The project should secure a base for development of livestock in the zone. This implies e.g.:

- reconstruction of three PSP (Postos de Sanidade Pecuâria) and construction of one new PSP
- increase the numbers of PIP (Posto de Intervençao Pecuâria) from two to five
- integrate the activities of the zootechnical station in Bissora with project activities
- make surveys of the parasitological situation in the zone
- perform vaccinations in the zone (targets see analysis below)

Animal traction

The general objectives states that the project should:

- increase production and productivity of especially sweet water rice, dry farming rice and groundnuts.
- increase the disposition of the rural labor force.

In the short run the project should gradually introduce animal traction through promotion activities, training of farmers and implementation of a medium term credit to aquire animal traction implements.

2. Achievements

The quantitiative development is shown in the following table. In addition, from what the mission saw during tours in the area the animals looked healthy and wellfed also towards the end of the dry season.

	1983 Actual	PlanOp	1984 Actual	Target Fulfilment
Training of assisting personnel	12	5	9	180%
Vaccination against				
- Blackleg	28,559	150,000	17,483	12%
- Anthrax	12,698	10,000	8,459	85%
- Rabies	2,000	1,000	135	13,5%
- Newcastle	578	30,000	928	3%
Distribution of lickstones	80	2 000	245	12%
Training centers	5	8	10	125%
Training of instructors	2	5	3	60%
Aquisition of oxen	-	20	10	50%
Training of oxen (pairs)	43	40	55	137%

3. Analysis

Animal health

The low target fulfilment depends in many factors:

- too optimistically set targets considering that animals are kept more for cermonial and property purposes than for economic benefits. This implies difficulties to convince farmers to e.g. vaccinate their animals
- difficulties to receive drugs, vaccines etc in time
- inexperienced management

In addition, migration of animals from outside zone-1 into the zone creates danger for transmission of diseases and this might threaten the objectives in long run.

Animal traction

The introduction of draught animals is an important step towards developing peasant farming. Compared to tractor hire the use of oxen is by far the most economic way of farming - for the farmers and even more so for the country as a whole. It is therefore important that all efforts are made to encourage farmers to use oxen and that these efforts are not undermined by offering the same farmers tractor hire service to a heavily subsidized price.

The implements used by the project seem to be well adapted and suited for its purpose. Problems have been encountered regarding the supply of implements by GUIMETAL and for the success of the project it is vital that these problems are solved.

4. Recommendations

The Mission recommends that

- the Programme socio-anthropologist should be involved to study the basic problems for a promotion programme of improved animal health.
- tractorservice is abandoned in areas where animal traction is promoted.
- SIDA-Bissau intervene to speed-up deliveries of oxdrawn implements from Guimetal.

Furthermore, the Mission finds the proposals in the separate evaluation report by Carlos Conchas to be organizationally sound and with a seemingly realistic level of ambition.

Donkey cart

IV.7. VILLAGE FORESTS (FLORESTA COMMUNITÁRIA)

1. Objectives

The outputs of the project are summarized in the plan of operation as follows:

- Development and extension of forest activities in the rural societies. This will mean to develop at the village and family level practical solutions to the problem of forest degradation.
- Training of personnel in the field of forestry
- Improvement of forests in the zone I by controlling bushfires and reducing erosion
- Basic knowledge about the forest

2. Achievements

The Project started its activities in 1983. Basic socioeconomic studies have been carried out in three pilot villages by Canadian personnel (SUCO).

During 1983 some other work was started in the pilot villages like plantation of some 4000 trees. Also nurseries and experiment plantations in Bissau and Bissora were initiated. In 1984 13.200 cashew trees were produced and distributed to villages. This is slightly less than 50% of what was originally planned (27.000). In the three pilot villages 2.500 trees for wood production were planted.

One important part of the project is training of local personnel. Such formation is taking place abroad as well as within the country. Three persons are studying abroad at university level (Técnicos superiores, USA (2) and Portugal (1) and eight at medium level (Técnicos Médios Florestais). These eight are studying in Senegal and they will finalize their studies in 1985 (2), 1986 (3) and 1987 (3) respectively.

Work is completed with planning and preparation of a two year course for extension agents (extensionistas florestais). This course will start in 1987. Fifteen students will be admitted to this training every second year.

The project has been hampered by the lack of a head of project during 1984 and beginning of 1985. A head of project has now been recruited and took up his duties in September 1985.

3. Analysis

The following table shows the intensity in forestry degradation due to e.g. shifting cultivation, uncontrolled bush fires etc. Cacheu being the main palmtree area of the country, is especially vulnerable to palm plantations degradation due to increase in bush fires and intensified tapping for production of palmwine.

Region	% palms	% forestry	% of degraded forest area
Cacheu	15	11,5	10
Oio	2,5	46	26
Bissau	3,5	1	14,5
Bofatá	1	58	21
Gabú	-	21	68,5
Tombali	0,5	49	12
Buba	1	37	30
Bolama	9	23	10,5

In view of this the Mission noted with satisfaction that the main approach of the project is that of reforestation and protection of the forest. Any activity in this field needs careful basic studies of the social, physical and economic environment and such studies have also been an important part of the initial stage of the project.

Due to many difficulties with first recruitment of SIDA personnel and then the problems around the contract with ORGUT (see III.12.2) the personnel necessary for achieving the goals of the project has been lacking up to mid 1985. It is, therefore, understandable that target fulfilment has been low.

It should also be noted that due to the initial 'next to nothing' knowledge of the forest problem area in the zone it will be a slow process of achieving a visible impact of the project. It is important that economic/social/biological etc data are collected and analyzed to develop a viable method of intervention and alongside experiments with species, forestry techniques, wooduse techniques are tested and later introduced. The forestry project increased its share of the funds from PlanOp to actual budgets. This is mainly due to the decision to purchase the professionalism and backstopping capacity of a consultancy firm.

4. Recommendations

In May the Mission got a feeling of the development of a very tense atmosphere between the Programme and Orgut. It is of utmost importance that the complicated and dubious contracting procedure is not allowed to influence the implementations of the contract. For the Programme it is vital to correctly utilize the professionalism and backstopping capacity of ORGUT to get a reasonable value for the money. This is certainly not achieved in a co-operation based on lack of confidence etc.

However, during the final visit in September the Mission was content to find that with the arrival of the ORGUT team and start of concrete work the tension seemed to disappear.

The Mission supports the idea to implement a two-year-course for extension agents.

Doubts were expressed regarding recruitment of a non-portuguese (spanish) speaking expert for the position as training expert. The Mission cannot understand and support this view. The training expert should primarily analyze the need of training performance etc and not be a teacher in the first place. It is therefore the professional qualifications rather than fluency in portuguese that should decide the assignment of expert.

During the Technical Committee meeting in September the reaction to the above statement indicated that what the project wants is a teacher not a training expert.

The Mission supports the idea to develop combined 'influence-test' centers in Bula and Ingoré. These should contain nurseries both for distribution but also for experiments and tests of planting material, test of agroforestry techniques including charcoal productions, improved stores, use of different saws, simple impregnation techniques etc.

IV.8. THE BASIC HEALTH PROJECT (BHP)

1. Objectives

- To improve the health of the population in the area with special emphasis on the rural village communities and the high-risk groups

- To provide a limited curative service and supervision of pregnancies and deliveries at the level of the community

- To use the health issue as a nucleus for social mobilization and community development on a general level

- The formation of a cadre of health-workers, and future administrators, with a village based perspective on health is an important by-product which is not explicitly stated among the project's objectives.

2. Organization

The means

The project has one base in the region of Cacheu (in Canchungo) and one in Oio (Mansoa). The Canchungo team has three supervisory nurses, five teaching nurses (enfermeiros formadores), two teaching midwives (parteiras de formaçao) and two social workers (agentes sociais). There is one foreign (cooperante) doctor, one nurse and one midwife. A catholic nun is also working with the project, which was led up to June -85 by the Belgian physician and his Guinean counter-part (homologo) who is a male nurse. A successor to Dr Devillé has not been appointed yet. The Mansoa team has a male nurse, counterpart to the Dutch physician, who is to be replaced by her newly arrived country-man. There are five health auxiliaries (enfermeiros auxiliares) working on the project and four are working part-time with it and also in the local health centres. There is one social worker and a British midwife who has a national counterpart as well.

Both groups have drivers from the MINSAP. Four cars have been financed through the Programme, on which the BHP relies for fuel, maintenance and repairs. (Some problems with break-down of cars used by the Mansoa group seem to illustrate the need for more day-to-day cooperation with the Bula Centre. With a staff member there representing the health branch of the Programme, the logistic needs of that branch would be considered together with those of the other branches and, in case of vehicle break-down, priorities could be quickly reconsidered. Such a redistribution of resources will not take place/is impossible, within the present organization.)

Methods of work

Almost all the village communities being interested, the main criteria used in locating a health unit are the number of inhabitants (more than 300) and the distance to a health centre (more than 5 kms).

By explanations to the local notables and responsibles and to popular meetings, the Project asks the village to select three or four interested community members, who should not be too young, preferably married and holders of land (to guarantee a certain stability). They are trained to be Basic Health Workers (BHW) or local midwives (MW) partly in the village and partly in the project head-quarters. One or two members of the project staff stay in the village up to a couple of months, preparing for the health unit. They acquaint themselves with the village people and take notes on the local health situation, including environmental sanitation and the like. At the same time, the villagers build the pharmacy with four rooms, one of them being meant for deliveries. Some building material (zinc sheats, nets etc) are provided by the project along with a supply of drugs (chloroquine, aspirin, ORS, tetracykline eye ointment, sulfadimidine) intended to last a few months. After some six weeks of training, the BHW and MW take up practise in the pharmacy, or, rather, continue their training on the job, being visited by the supervisory nurses of the project. The BHWs take turns in the pharmacy, where no fees are charged. The other community members are supposed to replace the BHW in his/her duties in agriculture and the like. After the first lot is finished, the community pays collectively in advance for the medicines. A set of delivery utensils (from UNICEF) is kept in the pharmacy and may be used by several midwives in the village, both those with the complete training and the traditional midwives who have received a brief instruction by the Project (traditional birth attendants, TBA, in the following. This type of training is done only by the Canchungo team so far.)

The Project performs immunizations in cooperation with the Extended Programme on Immunization (EPI, port: Programa Alargado de Immunizaçao - PAI) and with the Public Health Department of the Ministry. The latter cooperation includes members of the local health centre staff, who are the actual vaccinators in the campaigns in the villages. Immunization in the village health units are not within the present scope of the Project.

In half-urban Canchungo, there is a maternal- and child health work consisting of pregnancy check-ups including weekly chloroquine, nutritional rehabilitation of malnourished children and discussions with the mothers over hygiene, the children's growth curves, immunications etc. One distinct issue is the introduction of flours made from the local cereals into child feeding. (Milling increases the palatability and also the energy density of the carbohydrate staple foods by decreasing their water contents after boiling. It also opens the possibility of making an appropriate mix for local distribution.)

Both teams of the BHP in zone I perform health education in the villages. There have been local initiatives by, and together with, village school teachers to teach BHWs and MWs to read and write and to use health related texts in the alphabetization campaigns. Project staff lecture the extensionists on medical nutrition. Road to health charts are handed over to the mothers and the village health units have hanging scales. Together with the village population, a small number of latrines have been constructed. (Village cleaning campaigns have not been carried out.) Some waterwells have been improved by means of a concrete 'crown'.

The Project has studied cross-sectionally the nutritional status of the children below five years of age and keeps registers of births and deaths in the villages (see appendix for results).

Coordination with the other branches of the Programme takes place firstly through the Inter-Ministerial Committee, where the Project is represented by the national responsible for BHC. (There are similar projects in the other zones of the country as well.) Secondly, there are meetings with the Technical Committee fortnightly in Buba, where the activities are coordinated on the ground level. As already mentioned, there is cooperation with the local health centres and with Public Health. There is little contact with the hospital level of the regional medical care organization.

The period under consideration has seen substantial changes and developments in the Project's working methods. Up to 1982, mostly young people were recruited for the BHW education. They often moved and their concern with local conditions was tempered by the width of personal expectations that go with youth. Secondly, activities related to pregnancy and birth and also immunizations have been started. Thirdly, some central education of the village health agents has been introduced. (The system with licensed nurses staying in a village to instruct a few local health workers at a time was certainly not cost-benefit oriented.) Fourthly, the drugs for the pharmacy arrive only after some time of preparatory work in the village now. This favours a wider comprehension of the health issues on the part of the BHWs and the rest of the village population.

3. Achievements

Briefly, in the region of Cacheu 28% of the population outside 5 kms of a health centre (72 000) persons have access to a village health unit. In Oio, where the work started only in -82, the corresponding figure is merely a few percent, but it is 26% for the sector of Mansoa and 11% for Mansabá.

In Cacheu 389/2880 (14%) of the deliveries estimated to have taken place in the target population were supervised by somebody with at least a minimum training by the Project. Counting only the communities involved so far, the utilization of delivery care is 70% (389/560). In Mansoa the geo-geographical coverage is still low, but the utilization of the existing village midwives is near 100% (97 supervised deliveries in half a year in a population of 4390).

In the sectors reached by the vaccination campaign so far, the coverage (utilization) has been satisfactory.

4. Analysis of performance

There can be no doubt that both the <u>availability</u> and accessibility of basic health care in zone I has increased through the BHP. Utilization seems to have followed and is probably much higher than for the health centres. However, there is likely to be under-utilization for certain diseases as before and a discrepancy with the age-profile of medical needs. The youngest children, who suffer the greatest risks of death from disease, get comparatively little attention. The effectiveness of the Project's actions in terms of deaths or disease episodes averted or the like, is anybody's guess to put it bluntly. The anthropometric data collected may be useful as a general assessment of the children's nutritional status, but it does not allow the evaluation of change. The information on births and deaths does not seem systematic enough to serve the same purpose.

Another team, also under the MINSAP, have collected data on child mortality and growth in eight villages in zone I since 1979. Their results make a limited comparison possible between a few villages with and some without BHWs. In the communities reached by the BHP in Cacheu, there has been a decrease in mortality lately. The tendency has been confined to the neonatal period. Apart from that, no improvement can be discerned in the figures, which must, of course, not be interpreted as evidence of its absence on the whole. The method used by this team has proven itself in the setting concerned and could be slightly modified to serve as part of the effectiveness evaluation of the Programme.

The estimates on accessibility and utilization presented above are very rough. It would be desirable to have repeated population-based assessments of these variables in a representative sample. The questionnaire should include some simple questions relating to the health centres and sector hospitals as well (How far? When last? etc), and some relating to the other elements of Primary Health Care. Without such information a judicious mix of the action components can hardly be achieved on the ground.

Rather much of scarce resources are used by the BHP in order to provide medical care with limited repertoire. There is very little that the village health workers can do about tuberculosis and obstructed labour, which are much more important health problems than "malaria" in grown-ups or the common causes of headache. Yet the Project mobilizes and creates local resources far out-side its stated contents, which outweighs the mentioned disproportion by far. (For example, there are BHW who have started to convince the other villagers about the existence of the microflora by means of a microscope from the Project. There are reasons to believe that the BHWs can succeed faster than van Huygen could with the British Royal Society, and when they make their neighbours realize the role of the microflora in disease, real progress can be made quickly.)

However, a steady support from the higher levels of the health care system is essential, both in the shape of public health measures (TB, hookworm, malaria) and in the single case of disease or delivery. The fact that such a support is largely lacking now should not be blamed on the BHP. The new organization of Primary Health Care which is under way in the Ministry should contribute to improve this support.

The Project's emphasis in education is on the village health workers and seems to leave the other villagers nearly untouched. This includes the school children, who are a very important group in this context. Some efforts have been made, but rather diverse and patchy it seems.

The Project has its share in the problems of integration both with the rest of the health services and with the rest of the Programme. Important progress has been made here, but frictions remain.

The emphasis on pregnancy and birth is evident in the development of the Project in the last few years. This is sound. The attempts at reeducation of TBAs made by the Canchungo team are particularly interesting, even if other solutions may be better in the long run. (The national responsible for the Project mentioned a system with country-midwives similar to that in Sweden of old.) The Mansoa team has made important advances in the cooperation with the health centres. The health-work in Canchungo itself is an interesting model and the line pursued for the improvement of child nutrition (flours) seems sound and well adapted even for the rural communities. Establishing mills in some villages could be an issue for the Village Handicraft

Project.

The great strength of the BHP lies in its successful interaction with the people in the villages. In this context the Project has shown a good ability to modify its approach in response to problems met. The work seems to have gathered momentum now, there is a new will to cooperate with other activities and there is every reason to believe that the BHP shall go on contributing importantly to the dynamics of the Programme where this belongs - in the villages.

5. Recommendations

(Most of these 'have been in the sack before they came into the bag' and the evaluation group does certainly not claim originality.)

- One set of delivery utensils for every practising midwife to be kept by her in the house under personal responsibility. Thus, their conditions can be meaningfully inspected. The box can be taken away from TBAs who return to inappropriate traditional practises or the like.

- Teach the BHWs about immobilization of a limb with an infected wound and oral treatment with sulfadimidine in these cases.

- In the rainy season, the foreign midwives could go through the routines used by their colleagues in the health centres and give on-the-job training there.

- Considering the crucial importance of transport, <u>all</u> members of the project teams should have a two or three days' course on how a car works and what it needs to go on working. The idea that prevention is better than cure needs to be stressed. Changing a wheel, filling oil in the motor, in the transmission and in the air-filter of the Landrover, draining dirt from the fuel system of the same, filling water in the battery and cooling system and a few more things should be carried out <u>in practise by all</u>. There should be a label in each car saying when the next maintenance procedure is due (such as is the case in the cars used by the MDR). Dusty weather may make daily removal of dirty oil necessary.

- Leaving the improvement of water-wells to the Rural Water Project (RWP).

- Develop the cooperation with the RWP on health and hygiene education in the villages where pit-wells are being built.

- Raising the discussion with the responsibles on the central level, whether chloroquine profylaxis to all children under five years is really recommendable. The rural areas are mesoendemic at the most, not hyper or holoendemic. Overuse of chloroquine will probably hasten the appearance of chloroquine resistance.

- Distinct health education messages in the form of slogans brought across to the people during a short time period and then repeated later more briefly according to a long--term scheme. An example would be: "Children have small bellies." Every conceivable means should be used to say this with some simple explanations of what its consequences are (many meals per day of nutritious food etc). No other messages should be mixed into it. Portable loudspeaker in the market-place, written message to school--classes, places where people wait for transport, village meetings, radio broadcasts etc to stir up interest and make people speak between themselves. The spoken message must never take more than 5 minutes. (Other examples: "A child should walk the road of health" using TALC material for demonstration. "Malaria comes from mosquitoes" and explanations of its consequences. Such core messages should be repeated over and over again. Compare: "Nine film-stars out of ten....")

- Vaccinate school-children as well against tetanus with special efforts to reach the girls with three vaccinations properly spaced.

- Show the school-children the microflora in water in a microscope and have the teachers follow this up with two or three lessons on the consequences for the spreading of disease and for hygiene. Hand-washing should be demonstrated and practised.

- A small examination on health and hygiene could be held in the village schools. If found advantageous, competition between schools could be made an element in this.

IV.9. PROJECT OF ALPHABETIZATION AND EDUCATION OF ADULTS

1. Objectives

1. Promote literacy among the adult population

2. Educate adults in simple applied arithmetics and other primary school level skills

3. Promote local cultural and social activities (drama performances, singing, dancing etc)

2. Organization

The Project has 17 teachers-animators and one coordinator who work together with the agricultural extension agents in recruting villagers for the classes. The animators are recruited from students with elementary education. They are trained by MEN in adult education techniques but so far the Zone-1 Programme has had no influence on this training. The Department of Adult Education in the Ministry of Education supplies them with teaching material. There was a shortage of black-boards which was solved by improvisation with locally bought playwood. Chairs and tables are made of wood available in the villages and the classes gather under a tree, unless there is an empty school building. There is a lack of notebooks, paper, mimeograph originals and pencils. According to project personnel the socio-cultural activities would benefit from a film projector with a portable electric generator, some tape recorders and one or two projectors for showing slides.

There are classes in both Criolo and Balante. There are three levels comprising 6 months each, twice a week, a two hours lesson. Starting from the second level the education also contains mathematics.

The courses in arithmetic and management are given on two levels with the same duration and number of hours as the literacy classes. They contain the four rules of arithmetic, concepts of measurement, weight, volume etc and simple book keeping and administration in relation to the zone-1 Programme.

There are written manuals for the teachers and also some texts for the pupils and a math book. The courses end with an evaluation of the students' achievements.

3. Achievements

The work in the villages of zone I started only in -84 with 9 circles in an equal number of villages. By the beginning of -85 there were 17 circles in 14 villages with a total of 300 pupils involved (233 men and 67 women). In May there were 21 active groups - 14 in creole, 3 in balanta and 4 in arithmetic and management. By the end of -84, 71 pupils had been evaluated as showing satisfactory results and 10 had failed to do so.

4. Analysis

Literacy groups of a similar kind existed in the liberated areas already in the late 60's, so this kind of adult education is nothing new. The Literacy Project in zone I has been received with enthusiasm by the population. Apart from the simple material mentioned above, the main bottleneck of this work seems to be the education of teachers (animadores).

The line persued in relation to the language question seems sound. The classes start with alphabetization in the tongue people speak in spite of this not really being a written language, and then introduction of Portuguese on the second level.

One problem is that the villagers who achieve a basic literacy can hardly find anything useful to read in Criolo, apart from the book (o Kebur) used in the classes. The country's only newspaper is in Portuguese. The Programme could fill a gap here. It is interesting to compare with the situation in 18th century Sweden, where people could read but seldom write. The national calendars could be found in every cottage in the countryside in those days. They provided practical information on agriculture, hygiene, animal husbandry and the like and were probably quite influencial. These calendars were in fact the link between scientific progress of the time and the common people. Being more or less the only profane text available, they marked the first step of the Swedish peasantry away from an entirely magical-religious perception of life.

One of the main problem is that education is possible only during off season in agriculture - January to June - also this period is notched by frequent social ceremonies. Also the migration causes problems of continuity in the education.

5. Conclusions and recommendations

There seems to be a tendency of marginalization of monolingual groups, especially balanta, manjaco and mandinga women, if literacy classes are given only in creole. It is important that this is observed by MEN and that the Ministry should formulate a clearly defined linguistic policy which is lacking to-day.

An expanded support to the education of teachers-animators should be considered (in the form of additional financing through the Programme and the Ministry of Education). The physical resources of the new Bula school should then be utilized.

The training of animators should also include basic information of the strategy and methodology of the zone-1 Programme.

The Programme could distribute a monthly paper in Criolo containing simple advice on seeds, fertilizer and crops, drawings of simple arrangements to use in agriculture or animal husbandry and the like. Spontanous inventions by farmers in the area could be spread this way. Advice on the treatment of wounds, preparations for a home delivery, recipies for child nutrition etc could also be given.

Such a booklet could also give the names of local responsibles and where to find them, lists of what should be found in the shops etc. Such information could have a dual function in establishing norms of both the demand and the supply of social services.

Many of the issues raised by the Programme, e.g. nutritional security vs famine, health vs death from disease, a dirty well that dries out vs a safe new one, could be used as "generative concepts", in the sense of Paolo Freire, in these literacy classes. (We cannot tell to what extent this is already being done for lack of everyday contacts with the work in the villages.) Showing people the microflora in water through a microscope is a splendid example of introducing a "generative concept", that is being used by the Basic Health Project.

Community diagnosis by the community's own members might be a good application of basic literacy for a concrete purpose. Pupils could record the facts of their village on a simple form covering water, environmental hygiene, housing, vector breeding places etc and discuss the results with somebody from the Basic Health Project.

IV.10. THE RURAL WATER SUPPLY PROJECT

1. Objectives

1. To provide the rural village population of zone I with safe, constant and accessible sources of household water.
2. To assist institutions within the zone and the other branches of the Programme in solving their problems of access to water.

2. Organization

The Project, which is under the Ministry of Natural Resources and Industry, has expanded its number of employees from 7 in 1984 to 72 in 1985. This personnel is used in the following way:

- seven welldigging teams x 4 persons	28
- five maintenance teams x 2 persons (manual pumps)	10
- two rigteams x 6 persons	12
- 1 manual drill rig x 5 persons (max 25 m)	5
- 2 teams for casting the concrete top x 2 persons	4
- 2 investigation/maintenance teams for boreholes x 6 persons	12
- one head of project	1
	72

The capacity of one well digging team is 5 wells per year and each of the three rigteams can drill 30 holes per year. A Portuguese technician functions as a supervisor in the field. The Project has its facilities north of the river in Ingoré. Some of the light drilling equipment has been taken over from the Water Supply Project in Buba. Transport of men and equipment forms part of the logistics of the whole Programme.

There is an excess of demands for water-points from the villages. These are considered without regard for the community's involvement with the other branches of the Programme, but takes into account the quality of and distance to the existing sources of water. The presence of an institutuion in the village or near-by also has an influence. So has the presence and number of livestock. 150 persons per water--point, 500 meters walking distance and 25 l/person/day are the approaved norms for a hand-dug well.

Before starting to work on such a well in a village, the involvement of the population is sought. The hygiene education programme was not always so ambitiously carried out as being taught by the Water-well School. The positioning of the well is not critical for hitting water. The concrete rings are cast on the spot and centimeter-sized stones are added in large quantities at some levels of the ring in order to make it porous. Only a couple of rings are used at the bottom of the well, and they are put in place only after hitting water.

This normally happens within 10 or 12 meters of the surface. No rings are used to "crown" the well, but a large concrete top does and the opening has a lid attached. A wooden support carries a small wheel with the bucket rope sliding over it (see drawing).

At the request of the village the Project team constructs a watering place for the animals a little to the side and/or a concrete baisin suitable for washing clothes. The entrance to the well is fenced off to the animals. The village contributes symbolically to the costs of the building material.

So far the Project has not practised the follow-up observations on the use of the new well, which is done in the sector of S. Domingos (chapter III.13).

3. Achievements

14 hand-dug wells and six boreholes have been finished during the first part of 1985 by the pump school and 10 wells and 6 boreholes by the water supply project or are being finished at the time of writing. One old well in Cacheu has been improved, and a couple of drilled holes have been opened.

4. Analysis

The Programme has carried through a massive expansion of the organization during late 1984 and 1985. Due to difficulties with salary payments and material supply the work plans are behind schedule. However, at the end of 1985 the operations are supposed to improve considerably.

The hand-dug well with a rope and bucket is a slight but significant improvement of the traditional water source in the villages. The need for maintenance is minimal. (Yet we saw a couple of new wells where the rope had broken and the bucket was on the ground.) The construction with concrete rings at the bottom will probably in part prevent the gradual filling with wall material that occurs in this type of well. Still, such material will come from higher up on the walls, and these wells will probably need thorough cleaning after some years, just as the perfectly traditional ones.

From a hygienic point of view, one or two inpenetrable concrete rings at the top would certainly be advantageous.

What would be the additional cost of putting concrete rings all the way up, when the casting of them is done close by anyway? Why are the rings not put on the ground and allowed to sink with the digging of the pit according to the "classical procedure" at least in Sweden? (These questions are put from an amateurish perspective.)

One possible point of criticism would be that this type of well does not increase the quantity of water used by the households - a crucial factor to the spread of "waterwashed" disease. A mechanical pump, on the other hand, would do this by making it easier to fill the barrel. Empirical observation seems to off-set this argument. The quantity of water used per person has increased in many communities where this type of new well has been systematically studied (see III.13).

On the whole, the hand-dug pit well with a rope and bucket seems appropriate technically and can play an important role in rural development. Access to safe household water does not only serve health and hygiene in the immediate sense. Improvements in this field relieves the women of tedious work away from the house. It makes the growing of vegetables possible in the dry season, the only time of year when this can be done without heavy attacks by molds and fungi. It facilitates the keeping of livestock.

5. Conclusions and recommendations

The Mission supports the idea of considerably expanding the Rural Water Supply part of the Programme (which has already been decided on through the inclusion of the S. Domingo school).

The Mission urge the Ministry of Natural Resources to immediately solve the salary payment problem otherwise there is a risk of jeopardizing the whole programme through exodus of skilled workers. The salary payments should be no problem from 1986 onwards as the Minister of Plan promised to put all local funds at the disposal of the Programme.

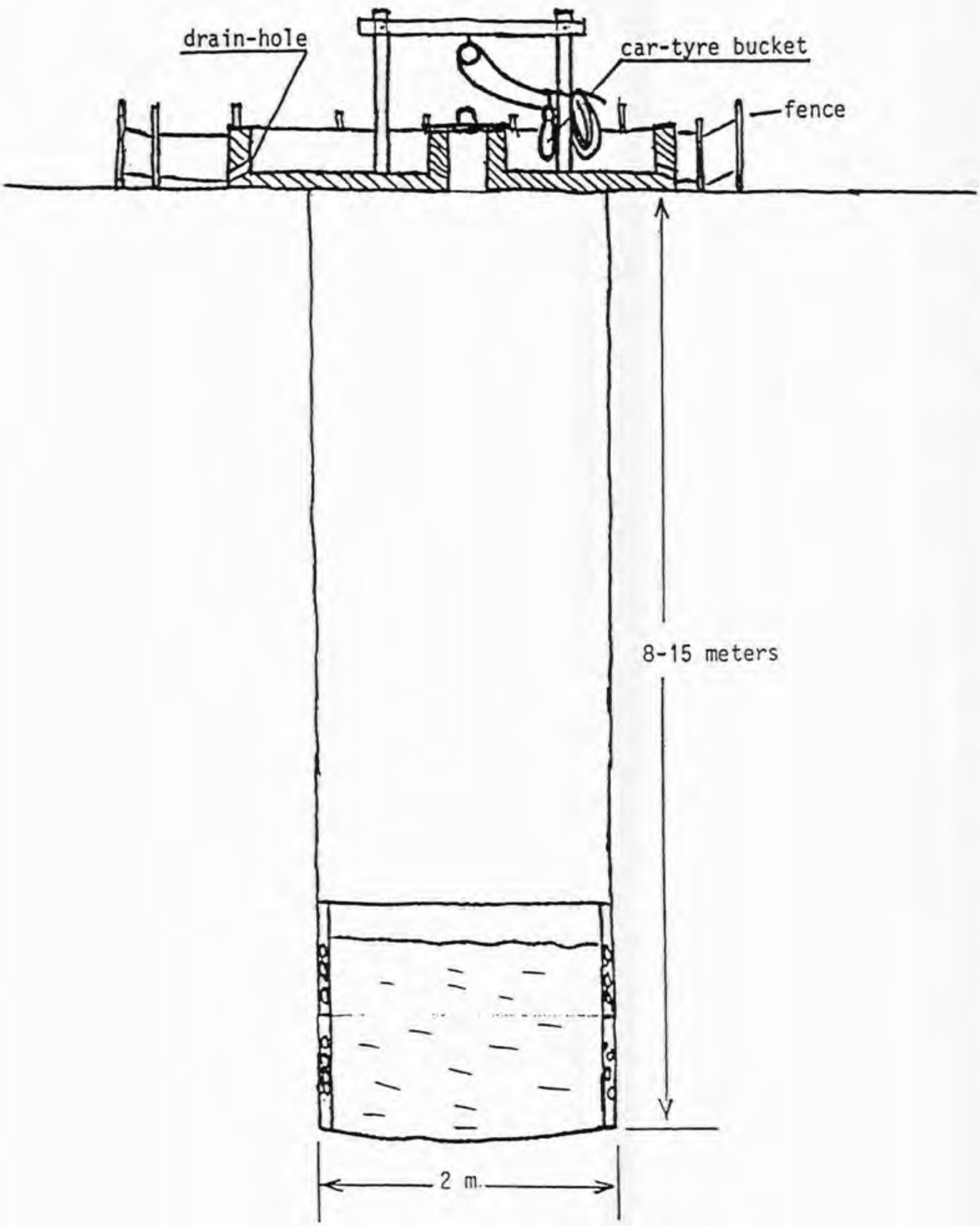
Another acute problem is the lack of transport. This situation is a combination of inadequate quota of fuel, careless driving and lack of proper maintenance in the north.

Bacteriological testing (E.coli and coliforms according to standard techniques in the National Public Health Laboratory) should be carried out in some new wells at the height of the rainy season to find out if contamination from the surface could be a problem with this type of well.

Improve the health education part of community involvement in cooperation with the Basic Health Project.

Carry out the type of two-days follow-up done by the S. Domingos teams, on at least some new wells. Villages with the child health monitoring system (appendix 3) should be given priority in this for the sake of assessing the health impact.

Figure 1. The type of pit well built by the Rural Water Supply Project



Village pond

IV.11. ROAD MAINTENANCE

A separate consultancy study of roadbuilding/maintenance was performed in May 1985. A detailed report was presented in June. The Mission cannot comment on this report from technical point of view. However, we will give opinion on the size and organization of work.

During 1985-1987 the World Bank has agreed to help in financing the following roads in zone-1:

- improvement of the asphalt roads Canchungo - Cacheu, Bula - Sao Vicent and Manson-Mansaba. In addition the landing sites of the ferry across the Mansoa river (the Bula ferry) will be reconstructed
- improvement of the gravel roads Canchungo - Caió and Farim - Senegal border.

The EG is financing a so-called bridge project which obviously also includes road improvement between the Senegal border - Sao Domingo - Ingoré. No information regarding the Ingoré - Sao Vicente part was available.

In the PlanOp certain secondary roads were identified for Programme maintenance. These roads were mainly small roads leading into otherwise inaccessible parts of the Programme area e.g. Cacheu - Biange, Palundo - Jolmete - Capafa, Bissorá - Barro, Bissorá - Olosatto.

However, the experience from Programme operations especially in the north and in Oio indicates a greater need of road maintenance than earlier foreseen. The consultant therefore investigated the following stretches:

Varela - Sao Domingo	50 km
Ingoré - Farim	70 km
Farim - Bissorá	40 km
Bissorá - Barro	25 km
Canchungo - Calequisse	25 km
Bissorá - Binar	25 km
Cacheu - Bianga	12 km
Palundo - Jolmete - Capafa	38 km
	285 km

The consultant's report strongly recommends a programme starting with rehabilitation of the roads and then maintenance of the same. The cost of rehabilitation of the roads in Cacheu and Oio is estimated at SEK 40,5 million during a 5 year period. For the same period the cost of maintenance of these rehabilitated roads is estimated at about SEK 12,5 million. The average annual cost of the road programme will then be 10,5 million i.e. 50% of an average zone-1 Programme budget. The Mission suggests that:

- if reconstruction is considered this should be a separate project outside the zone-1 programme.
- in relation to road maintenance the Director of the zone-1 Programme should execute control of work programme and resources.

The Mission can also establish:

- that the road consultancy is long over due
- that the road programme will not be possible to implement according to plans and
- that the consultant dismisses an alternative of maintenance only on a small scale, as "squandering with small insufficient maintenance resources on badly rundown roads cannot be seen as a viable policy".

TERMS OF REFERENCE

Subject

A pilot project for rural extension started in 1977, in the Cacheu area, partly financed by the Dutch government. In 1981 the project was transformed into the SIDA-supported Programme for Rural Development in Zone 1, comprising three sectors in the Oio area. In the future it may be extended to the rest of the Oio-Biombo area. Of the country's 800 000 inhabitants, about 280 000 live in the Oio and Cacheu areas.

The programme today contains the following projects:

- Rural water supply
- Training
- Crop trials and multiplication of seeds
- Extension
- Distribution of investments/credits
- Animal health and animal traction
- Basic health
- Adult education
- Forestry

Due to the integrated character of the programme, it comprises activities normally administered by different ministeries. An Interministerial Committée has been formed to coordinate the different activities.

During the Dutch leadership some partial evaluations were carried out. However, no evaluation has been made since 1981. No monitoring routines have been introduced into the programme. The long term impact of the programme has not yet been measured.

In 1983 a prolongation of the programme for the period 1984 - 86 in the agreement was decided that a mid-term evaluation should be carried out during 1985. For the planning of continued activities after 1986, a final report of this evaluation should be presented before the end of 1985.

Terms of Reference for the evaluation mission

The evaluation team shall form an opinion on the Programme's effectiveness regarding impact on resource growth, in terms of economy, infrastructure, health and science, as well as on equalization of income, property, utilization of social services and political influence. In order to obtain its objectives, the mission should use a questionaire adapted to SIDA's strategy for rural development.

The evaluation shall analyze whether the programme's means are sufficient to bring development about. It shall also analyze the increase of productivity among different categories of farmers, and the time and labour savings these farmers may achieve. The evaluation shall form an opinion of the ecological and alimentary consequences of the programme.

The evaluation shall analyze in detail to what extent the principle of people's participation has been realized in the different activities.

The evaluation shall analyze explicitly problems of technical or political nature emerging during work, and recommend possible solutions to these.

The evaluation mission shall analyze the different projects from a technical point of view, in accordance with the distribution of activities previously described. The mission shall also estimate the adequacy of the present composition of activities and their relative weight within the programme.

The mission shall pay special attention to the evaluation of the efficiency of the programme administration, as well as to the general capacity required to realize a programme of this kind. An economic survey will form part of the information available to the mission.

The evaluation team shall systematically analyze areas where the available documentation indicates insufficient impact of the programme activities, and suggest possible remedies to these problems. Special attention shall be payed to the development of incomes, to the effects of agricultural innovations, and to data concerning health and nutrition. The report of the team shall contain an annex with the most important statistical facts utilized in the evaluation.

Composition of the team

Due to the problem to find suitable personnel for the evaulation team, and to the limited capacity of the programme to receive visitors as well as to general problems connected with the coordination of large groups, the team has been limited to four persons. The next annual review will pay special attention to the evaluation of the adult education programme.

The team will be composed of the following members:

- Economist - team leader
- Agronomist
- Physician
- Sociologist of Social Anthropologist

The responsibility for the evaluation shall be distributed in the following way (x = principally responsible):

	Economist	Agronomist	Physician	Sociologist/ Anthropologist
Rural water supply	x	x	x	
Training		x		x
Crop trials and multiplication of seeds		x		
Extension		x	x	x
Distribution of investments/credits	x			
Animal health and animal traction	x			
Basic health			x	
Adult education (evaluated seperately)				
Forestry activities		x		x
Management, administration planning & monitoring	x			
Coordination of the work of the evaluation team	x			
Nutrition and health aspects			x	
Aspects of the objectives of the team				x

Duration of commission (weeks)

	Preparations	Field work I	Prereport	Field work II	Final report
Economist	1	4	1	2	1
Agronomist	1	4		2	
Physician	1	4			
Sociologist/ Anthropologist	1	4			

One month after the completion of "Field work I", the group shall present a preliminary report, and two weeks after "Field Work II" the final report. The group shall present the main findings before leaving Guinea-Bissau.

Time-Table

Field Work I - April/May
Field Work II - September/October

Budget

In the budget of the programme 500 000 SEK are reserved for this evaluation.

Participants in Guinea-Bissau

It is very important that Guine-Bissau participates in the mission's field work by proposing suitable technicians, independent of the programme, who can work together with the team. We suggest that the Interministerial Committée prepares a selection of experts.

Recruitment

The Swedish University of Agricultural Sciences/Int'l Rural Development Centre (SUAS/IRDC)will take responsibility for the recruitment of the evaluation team and may then utilize SIDA's institutional consultants. The consultants shall be independent of both SIDA and SUAS.

LIST OF PARTICIPATING PERSONS IN MEETINGS AND INTERVIEWS

		- Minister of Rural Development and Fishery Carlos Correia
Members of Interministerial Committee	- Chairman	- Minister of Economic Coordination, Planning and Internation Cooperation, Bartolomeu Simoes Pereira
	- M.D.R.P.	- General Secretary, Avito José da Silva
	- M.S.P.	- General Secretary, Dr. Medina
	- M.E.S.	- General Director for Constructions, António Barreto
	- M.R.N.	- General Director for Hydric Resources, Joao Cardoso
	- M.E.C.	- Secretary of State, Manuel Barcelos
	- M. Plan	- General Director, Ansumane Mane
	- SIDA	- Chargé d'Affaires in Sweden, Ann Charlotte Ohlstedt

Program Co-ordinator - Lorenzo Caballero

Program Director - Jorge Oliveira

Members of Programme Technical Committee:

Name	Pro/Serv	Function
José Luís Sousa	PAA	Technic.Assistent
Ana Maria de Sá Almeida	Forests	Director
Arnulf Ødegaard	Forests	Co-ordinator
Eero Timon	GAP	Economist
Magnus Bergström	Swedish Emb.	PDRT/Fish.Respon.
Augusto Rocha	Animal Tract.	Technician
António Neves Aimé	Oio Co-ordin.	Co-ordinator
Filomena Mendes	Training Serv.	Co-ordinator
Rui Borges Alexandrino	Adm/Fin Serv.	In charge
Bente Topsøe-Jensen	GAP	Social anthropol.
Manuel Cardoso Abrantes	GAP	Rural Ext.Techn.
Atilano Joao Mendes	MCEPCI	In charge of DPR
Muzante Gomes	Alphabetization	Co-ordinator
Marcos António Lopes	Rehab/bolanhas	Department Head
Ansu Camará	PEAA	In charge
Makker M.Sanhá	S.T.M.	Head
Henrique Barros	B.Health/Cacheu	In charge
Marius de Jong	B.Health/Oio	In charge
Ventura Pedro Silva	Rural Water/Oio	Regional Delegate
Anselmo da Silva Gonçalves	Adm.and Finance	-
Manuel Cristiano da Silva	Fishery/Oio	Supervisor
Joao Herculano Graça	Credit	In charge
Rui Daniel Andrade	PEAA	Agronomist
Rui Barreto dos Santos	Animal Husb.	In charge
José Carvalho	Cacheu Region	Co-ordinator
Marcelina Barbosa	Cacheu Region	Soc.Work Co-ord.

In addition, several staff of the PDRI, especially in the extension department, have given valuable information to the Mission.

Others - Hugo Borges - General Secretary for Ministry of Commerce

- José Felipe da Fonseca - GAPLA

- Ulf Fransson - GAPLA

- Dilma de Melo - former socio-anthropologist PDRl

EVALUATION OF THE INTEGRATED RURAL DEVELOPMENT PROJECT IN ZONE I IN TERMS OF CHILD HEALTH. A SUGGESTION

I Purpose and motives

1. Child health is closely related to the very objective of the Programme (i.e. the well-being of the rural population) whereas other evaluation measures are more related to the means used for this objective.

2. There is a risk of damaging child health, without knowing, by the process of "modernization" caused by the Programme. Examples from other countries: shortening of the breast feeding period due to changes in the work situation of mothers.

3. The necessary technical skills already exist in Guinean hands and the method suggested below has already proven feasible in rural areas of the country.

II Study group

The children up to 5 years of age and the pregnant women of a sample of villages representing statistically zone I (regions of Cacheu, Oio).

The principles of cluster sampling would be applied together with a qualified statistician. The approximate size of the sample would be 20 villages with a total of 8 000 inhabitants, meaning some 1 400 children; 350 births, and 120 deaths below 5 years of age per year. The sample would be stratified according to ethnic group and/or administrative sector and/or degree of involvement in the Programme. The same villages would be followed for at least two years.

III Methods

The ends and means of the work will be carefully explained to the population of the selected villages. Collective consent obtained, a map will be made indicating the position of each compound and its chief. The villages will be visited every 4 months by a mixed team from the MINSAP (BHP) and from MDR (the agricultural extension agents of the village, if there are any).

On each visit the children will be examined in the morning. In the afternoon each compound of the village will be visited by the team to register pregnant women and inquire for children examined at the former visit but not today. The age of the child will be determined by the method used by the "SAREC" team. They start asking about the season of birth according to the agricultural calendar and then the year of birth which is compared with biological criteria (number of teeth etc). A child health chart will be given to the mother and explained. She will be asked to bring the chart to the examination site which will help re-identification.

The agricultural extension agents will be trained in standardized methods of measurement and weighing and also taught to determine a child's age. This will take place during 3 days of their "re-cycle training". A member of the SAREC team will teach together with a competent supervisor.

Simple treatment will be given on the spot to sick children. The mothers of the children who did not grow well will be given an appropriate health education message.

Please see suggested protocol enclosed.

IV Practical points

A well qualified person on temporary employment should be responsible for the instruction of the extension agents and should supervise the first campaigns in order to guarantee that the collected information is reliable.

In the first phase of the work the results will have to be processed outside the country. A group of nationls should be educated for this purpose, but that will be a matter outside the Programme.

Each campaign in the field would take 3 or 4 weeks and with 4 months of interval this would mean some 300 work days per year, the driver being included. The use of fuel is difficult to estimate but the visits in the villages will certainly fill other logistic purposes as well.

Suggested time table:

1985 June-July: Selection of the sample; visits to the villages; maps of the villages; purchasing of material.

August-November: Details of the forms and procedures; planning of education of extension agents and health cadres; preparations for the processing of results.

December: Instruction of the teams; pilot field work.

1986 January: First field campaign.

February March: Processing of results

May: Second campaign etc.

V Budget (Swedish crowns)

Material cif

Scales	2 000
Measuring boards	1 000
Medicines	6 000
Health charts (RTHC)	3 000
Teaching material for RTHC	1 000
Others	2 000

Consultant (instruction, supervision)	
Travel fees	14 000
Salary two months	40 000
Processing of results (refers to 1st campaign, each of the following will cost less)	
Coding, 20 hours	4 000
Computor programming, 20 h	4 000
Computor time	2 000
Others	1 000
Total	80 000

Integrated Rural Development Project in zone I. Child health follow-up

Date .... / / 1-7

Village .... / / 9-10

Name of child .... / / 12-14

Sex M F / / 16

Date of birth .... / / 18-24

Name of mother .... / / 26-27

Pregnant Post-partum amenorrhoea Menstruating / / 29

If pregnant, how many "moons" menstruation failed? .... / / 31

Have you another child below 5 years? ....

Compound chief .... / / 35-36

Is mother still breast-feeding this child? Yes No / / 38

Does child get anything apart from breast:

rice millet sweet potatoes ground-nuts

palm oil dark green leaves fish, sea food

pap from flour or .... milk powder

other .... / / 40-41

Weight .... / / 43-45

Height .... / / 47-50

Remarks ....

/ / 52

Why was child not examined this time:

Moved Died Temporarily absent Not known here / / 54

If moved or dead, when: ..... / / 56-62

If dead, how: .... / / 64

" , was child still breast-fed: .... / / 66

" , treated where:

Regional hospital Sector hospital Health centre / / 68

Health unit Elsewhere .... Not by Health Services ......

V Orçamento (coroas suecas)

Material	
Balanc,as	2 000
Réguas para medir a altura	1 000
Medicamentos	6 000
Tabelas de saúde (RTHC)	3 000
Material de ensino para RTHC	1 000
Diversos	2 000
Consultor (instruçao, inspecçao)	
Viagens	14 000
Salário, dois meses	40 000
Avaliaçao de resultados (refere-se à primeira campanha, as campanhas consequentes serao menos dispendiosas)	
Codificaçao, 20 horas	4 000
Programaçao do computador, 20 h	4 000
Utilizaçao do computador	2 000
Diversos	1 000
Total	80 000

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