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FOR WATER SUPPLY AND
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tamale
archdiocesan
development
secretariat

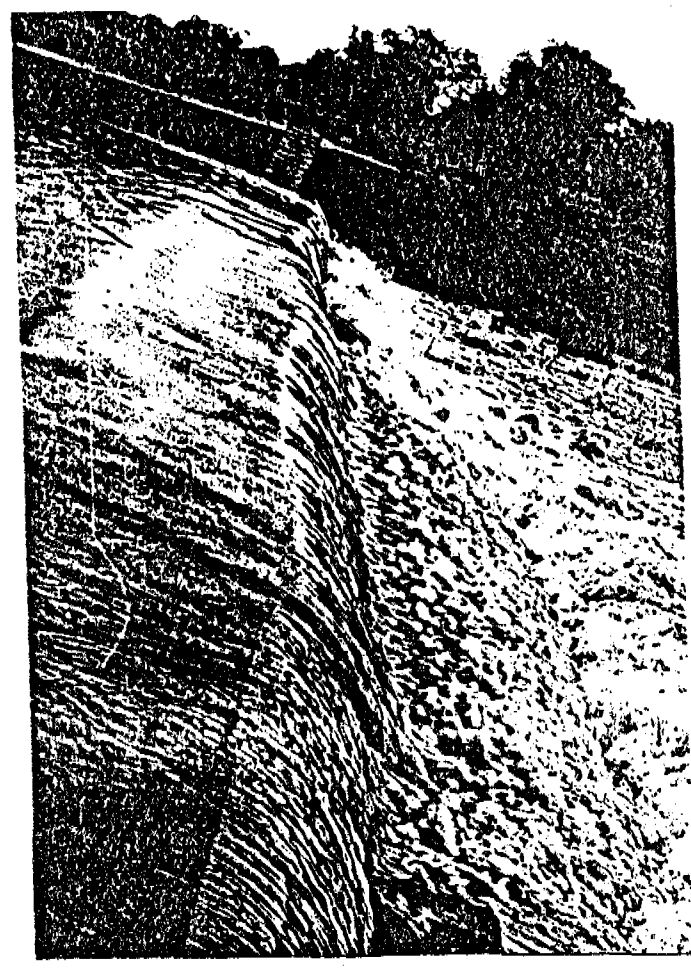
Village Water Reservoir's

Tamale, Ghana N.R.

Half-yearly report

June- Dec' 90

824 GHTA91



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the netherlands

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sawa
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June '91

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List of Abbreviations

| | |
|-------|--|
| ACDEP | Association of Church Development Projects |
| ADC | Archdiocesan Development Committee of Tamale |
| CRS | Catholic Relief Service |
| PHC | Primary Health Care |
| TAAP | Tamale Archdiocesan Agricultural Programme |
| TASC | Tamale Archdiocesan Service Centre |
| TBA's | Traditional Birth Attendants |
| TOR | Terms of Reference |
| VHW's | Village Health Workers |
| VWR | Village Water Reservoirs |
| WSC | Water Steering Committee. |

INTRODUCTION

Every half year a progress report is made. This frequent reporting should enable the Archdiocese by its Water Steering Committee, the Consultant SAWA and CEBEMO as funding agency to follow and monitor the programme.

The practise is that these reports are published 3-5 months after the end of the period. This is due to the fact that this report is based upon the halfyearly section reports. Regularly these reports are delayed and so also this overall report.

This time it is only in June that the report is finished. The ideal is that this report is published 2 months later so in February and August. Standardizing the report is one part of the solution and very important is that the section reports are of a quality that it gives all the details worked into this report. Ideally the chapter 1 should be the summaries of the different section reports. This has not been possible than for that of the Animation section reports the last times. My compliments to the writer(s). Within a few days all section heads will start to pain their brains to write the halfyearly progress report.

I have finished this one and I am ready for the next.

June 1991

Hans Vos.

| <u>Village</u> | <u>Population</u> | | <u>Activity 2nd Semester'91</u> | <u>Remarks</u> |
|---------------------|-------------------|-------------|---------------------------------|----------------|
| | <u>1990</u> | <u>2010</u> | | |
| Kunguri | 780 | 1710 | design, anim. prog. | |
| Tolon Che- shegu | 600(2) | 1315 | design, anim. prog. | |
| Kunkulun | 825(2) | 1807 | design, anim. prog. | |
| Gizaa/ Kukuo | 990(3) | 2170 | design, anim. prog. | |
| Voggu Gundaa | 700 | 1535 | social survey. | |

During this semester orientation visits were made in our working area according to the following table 2.

Table 2: List of villages where orientation visits were made.

| <u>Village</u> | <u>District</u> | <u>Remarks</u> |
|----------------|-----------------------|-------------------------------|
| Fushili Yakura | Tamale | not selected |
| Sankpagla | " | no co-operation(not selected) |
| Tibogunayili | Tolon Kumbungu | Selected |
| Gbanjon | " | not selected |
| Kpendua | " | selected |
| Kalinka | " | not selected |
| Fihini | " | " |
| Kasuli Zali | " | selected together with Voggu |
| Kasuyili | " | selected |
| Tingolin | " | selected |
| Tamaligu | " | not selected |
| Kayarono | Sabaga Dist. | |
| Grunshi Zongo | " | |
| Katanga | " | |
| Kpolo | " | |
| Kalande | " | |
| Geri-Shanu | " | |
| Kulupi | " | |
| Katiejeli | " | |
| Kenkenre | " | |
| Zankon | " | |
| Nyamandu | Savelugu-Nanton Dist. | selected. |

1. PROJECT EXECUTION

1.1 Programme

The past semester was marked by the rainy season. From middle of July until the begin of November no work was performed in the field except the ongoing work of the Animation Section, the maintenance training on the dams, and orientation visits in Salaga district, the water quality monitoring. In-service training was given to the TS staff in the field of surveying. The final draft of the project document phase 2 had been forwarded to CEBEMO but no official reaction was received at the end of this period.

During this semester we received 8 applications covering more than 20 villages for dams or water supply and 241 applications for employment.

A first draft of a water policy was made by the project manger but lack of time at the Water Steering Committee meetings made this issue not to be thoroughly discussed.

1.2 Area and Population

The villages where the project worked were still mainly in the Tolon/Kumbungu district. Because of the uncertainty of the ability to purchase extra vehicles new villages were only selected in the same area as before. In November it became clear that some investments could be made and the purchase of a double cabine pickup made it possible to select three groups of villages in the Savelugu and Tamale districts (Zion Kpalun and Manguli).

Table 1: Project Villages and Population

| <u>Village</u> | <u>Population</u> | | <u>Activity 2nd Semester '91</u> | <u>Remarks</u> |
|-----------------|-------------------|-------------|--|----------------------------|
| | <u>1989</u> | <u>2000</u> | | |
| Gbirimani | 1700(2) | 2500 | follow up monitoring | |
| Dimabi | 1721(3) | 2500 | wells, finish fencing, m.t.+monitoring | 100% finished. |
| Aseyili | 530(2) | 700 | m.t.+monitoring | |
| | <u>1990</u> | <u>2002</u> | | |
| Buyili | | | | claycore not yet made. |
| Gariziegu | 950(3) | 1520 | finish wellaprns, fence maint. train. | clearing spillway is left. |
| Kpachiyili | 337 | 450 | wellaprns maint. train. | 100% finish. |
| Yong Dakpenyili | 1344 | 2150 | main. training install. well level recorder. | 100% finish. |

The field work started again on 29/10 in Gariziegu and in Kpachiyili on 5/11. In Buyili a traditional well was improved. On 19/11 the construction of wells and a storage tank supplied from the drinking water dam started. The construction of a dam started on 10/12 in Tolon Chesehegu.

The Welldigging activities were mainly directed to the preparation and prospection of the sites in the Gushegu district. Payments were late so it was only in December that well construction really started.

In the following table 3 the cost of the different activities are given.

Table 3: Investments in Projects 2nd Semester 1990

| <u>Name of project</u> | <u>Cost of Equip. & welldigging units</u> | <u>Consummed materials</u> | <u>Extra Costs</u> | <u>Labour input villag.</u> | <u>Total</u> |
|------------------------|---|----------------------------|--------------------|-----------------------------|--------------|
| Compound 1) | 2,248,375 | 522,611 | 83,200 | n.a. | 5,969,456 |
| 2) | 1,671,688 | - | 1,443,582 | | |
| Gariziegu | 154,500 | 20,800 | 11,400 | n.a. | |
| | 546,550 | 33,800 | 119,500 | n.a. | 816,550 |
| Kpachiyili | 94,000 | 46,650 | | 3)35700 | |
| | 386,350 | 194,500 | | | 757,200 |
| Yong Dak-penyili | 272,700 | 256,250 | | 3)86200 | |
| | 770,800 | 148,582 | | | 1,534,532 |
| Dimabi | - | - | | | |
| | 3,665,625 | 1,766,170 | | 3)99300 | 5,531,095 |
| Tolon-Chesehegu | - | - | | | |
| | 3,479,500 | 75,617 | | - | 3,555,117 |
| Buyili | - | | | 3) 9,300 | 9,300 |
| | | Total | | | 18,173,250 |

Note 1) = cost in the 3rd Quartor ;2) = 4th Quarter ;3) = whole semester.

The bill for the compound includes at least 01,646,022 for production of prefab elements (pillars, gutters, tiles and gabions) and will be charged to specific projects in the field later on.

1.5 Animation Activities.

This paragraph is subdivided into two parts, 1.5.1 in which the major developments in the animation programme is given and 1.5.2 gives an overview of the activities in the villages. In this report the major outlines are given. For more detailed reaching I refer to the Animation section halfyearly report.

1.3. Approach and Procedures

No major changes have taken place in our approach and procedures. The step by step manual is not yet ready and will be published the next semester.

1.4 Rural Engineering Activities

This semester was marked by office work. The new technical supervisor had a difficult start and had to acquaint himself with the job. The two new senior staff members went also through a similar working-period.

1.4.1 Survey and design

The survey unit has been reorganised. The surveyor resigned in November for health reasons after persistent requests to become a senior staff member failed. A draughtsman is also appointed to be able to cope with the drawing work load.

And on the Job-training was given on survey work to the new survey staff.

Several drawings were made (Tolon Chesegu, Kunkulun and Gizaa).

No soil tests were carried out this period.

Water Quality

The monitoring work on the presence of cyclops and faecal coliforms continued. No conclusions have come out yet. The turbidity was also monitored whereby those of Dimabi and Kpachiyili have been disappointingly high (more than 1000 NTU)

Hydrology

The automatic rainrecorders were installed in Dimabi and Yong-Dakpemyili. The planned level recorders were not installed. In Yong Dakpemyili the measuring well was not finished and the rainfall did not permit it to finish until November/December. In Dimabi, a watermeter will register the amount of water drawn from the wells.

Designs

No design reports were made. All 3 engineers have worked on designs but unfortunately like other years no Village Water Supply reports could be presented before construction started. The same standard designs for type of well aprons and spillways were made.

1.4.2 Constructions

Some finishing works were carried out Kpachiyili, Yong Dakpemyili and Guriziegu in July.

Scheduled construction works in Nafram and Yepiligu could not start as a result of severe social tensions between the two villages. During the whole period the District Secretary and the Regional CDR organiser worked to settle the dispute but, alas!, no solution has been found yet.

Work then focussed on the compound; improvement of fence, drainage, concreting the floor in the parking shed to enable fencing pillars, concrete tiles and concrete gutters to be made (resp. 688, 1039 and 23 pieces). The shed is now also used for welding works and the fabric of gabions (90 pc) are executed there.

Table 4. activities

| VILLAGE | A C T I V I T Y | | | | |
|------------------|---|--------------|----------------------------|--|------------|
| | Preparation Social survey discussion alternative | Construction | Water-Hygiene education | Maintenance training/ follow-ups | Monitoring |
| Ghicimani | | | | x | x |
| Tibagu | | | | x | x |
| Aseyili | | | | x | x |
| Adurbliyili | | | | x | x |
| Dimabi (1) | | | | x | x |
| Gariziegu (2) | | | | x | x |
| Chanayili | | | | x | x |
| Buyili | | | | x | x |
| Kpachiyili | | | | x | x |
| Nafraan (3) | x | x | x | x | x |
| Yona Jakpemyili | | | | x | x |
| Cheshe (4) | x | | x | | |
| Yepeligu (3) | x | | x | | |
| Kunguri (5) | x | x | x | x | |
| Tolon Cheshegu | x | x | x | | |
| Gundaa | x | x | x | | |
| Kukulun | x | | x | | |
| Jekpahi | x | | x | | |
| Kukuo | x | | x | | |
| Gizaa | x | | x | | |
| Bagon | x | | x | | |
| New Villages (6) | x | x | x | | |

1.5. Animation Activities

The social survey was slightly adapted, but the questionnaire is still found to be long.

Time was given to the analyses of the social survey by one team the other will come on later; in order to give a better understanding of the setup and the purposes of the questions.

The discussions of technical alternatives creates a new awareness amongst the villagers. Preferences for certain type of dams are sometimes based on i.e. the fence with concrete pillars instead of the damtype itself. Unfortunately some discussions started before an analyses of the social survey was done and therefore were less rich than could have been.

Some water quantity surveys have been done in Kpachiyili and Dimabi resp. 5.5 days and

The major outcome was;

Kpachiyili; 15 ltr. per person per day brought home in September water used at the damsite was not included.

Dimabi; 22.6 ltr. per person per day brought home in August.

An explanation of the difference could be that in Dimabi quite a few women made sheabutter or soap thereby using a lot of water. Also in Dimabi cloth washing was done more often near the homes than in Kpachiyili. The observation also revealed that not all villagers are using the drinking waterdams. Reasons for this were partly foreseen - nearness of wells. Another reason however is that the drinking water dam contains water looking more muddy than from other sources; that appearance makes it very difficult for the Animation team to convince the villagers of the cleanliness of the water.

The guinea-worm slideshow and the consequent group discussions are still the most frequent health talks. In the near future the team will (re) try other methods like discussions about G.W. with elders and role plays and try to relate the contents of the talks as much as possible to village reality.

More and more villages showed an interest in pitlatrines and talks about diarrhoea. Representatives of interested villages were taken to sample latrines, advantages/disadvantages of which were discussed. The team prepared talks and roleplays about prevention/causes/treatment of diarrhoea when ever possible, cooperation was sought with other health instituons - the healthpost or vhw's and tba's in the villages. The evaluation of the maintenance training programme on village approach organisation and follow-up visits resulted in some minor adaptations of the content of the various training sessions. The general idea still holds. However the team decided to include background waterhygiene education into the next training, because those maintenance team members who are not vhw's or tba's find it very difficult to explain health background. The experience gained from the first programme also showed that the Animation team should be the major organizing force behind the programme. The health posts especially the health inspectors are willing to help but cannot take over because of lack of funds, transport etc.

For the Technical Section a gravel sieve with vibratory motion, handdriven, a mould for precast apron gutters and several well rings and covers, water intake filters etc. have been constructed.

For the Technical Section a start was made with another container office.

Ad 4. Ordering and Receiving Projects Goods

In Annex I (list of orders) a summary is given on the orders under way and made this semester. The arriving goods came in with the following containers.

| | | | | |
|----------|----|---------|----|----------|
| CAP | 73 | arrived | on | 3-8-90 |
| CAP | 74 | " | " | 24-8-90 |
| TAAP | 24 | " | " | 22-10-90 |
| Tamwater | 12 | " | " | 31-10-90 |
| Damongo | 1 | " | " | 28-11-90 |
| CAP | 77 | " | " | 20-12-90 |

DAF spares in store for the waterpump proved to be the wrong type when they had to be used. The parts were exactly those mentioned in the catalogue but later it was found out that the tropical trucks had another type of pump. This was not brought to our notice.

The result was that they had to be flown in and the truck was immobilized several weeks. There are probably more spares like this and a request was made to the dealer in The Netherlands to inform us.

The performance of plant is given in table 5.

Table 5: Utilisation of Equipment 2nd Semester 1990

| <u>No. of Equip.</u> | <u>Type</u> | <u>Total operation hours</u> |
|----------------------|-----------------------|------------------------------|
| 1 | Wheelloader 936E | 135 |
| 2 | Bulldozer D6H | 50 |
| 3 | Bulldozer D6H | 58 |
| 4 | Excavator 215 LC | 119.5 |
| 5 | Compactor Bomag 173 | 50 |
| 6 | Tipper Truck DAF 1800 | 153 |
| 7 | MP-truck DAF 1800 | 180 |
| 8 | MP-truck DAF 1800 | 213 |
| 9 | Motor pump Tr3/J156 | 0 |
| 10 | Motor pump LV1/J70 | 11 |
| 11 | Compressor IR | 51.5 |
| 12 | Clompressor IR | 70 |
| 13 | Low loader | 44 |
| 14 | Compaction plate | n.a. |
| 15 | Motor pump LV1/J70 | n.a. |

Note: In the TS halfyearly report the data for Totalshift hours, Mechanical availability, Efficiency rate and mechanical utilisation was not given. Lack of time prevented from calculating it myself from the data sources (weekly machine reports).

1.5.2 Activities in the Villages

Table 4 gives a summary of the various activities in the villages.

Monitoring Programme

The GW surveys took place in the following villages. Dimabi (3), Gariziegu, Buyili, Kunguri, Tolon Cheshegu, Gundaa Kukulun, Jakpahi, Bagon, Kukuo, Gizaa, Aseyili and Adumbliyili. Infection rates were averages of 10.3% in the Dry Season and 2.9% in the Wet season. Percentages varied from 27 to 2% in dry season and 5.9 to 0.4% in wet season.

1.6 Workshop

During this period the equipments were brought into the compound to be serviced, repaired and improved on where necessary. Flexible maintenance schedules are adopted to reduce interruptions with production targets.

A summary of the workshop activities are:

1. Maintenance and repairs of rolling fleet and machinery.
2. Designs for several (metal) constructions and their execution.
3. Improvement of compound infrastructure
4. Ordering and reception of project goods.

Ad 1. Cat Dozer D6H

Improved oil coolers (infact the ancient types) were received under warranty and put in store because the leaking cores were already replaced.

DAF Tipper Truck

The hydraulic tipping system is still causing frequent problems. For all DAF trucks the front drive propeller shafts had to be replaced by improved versions inspite of regular greasing. Also the air intakes have been made higher to avoid dust intake as was planned.

Low loader

Whilst renewing the wooden floor it was detected that the main frame was seriously perched through by rust. The lowloader has therefore undergone a thorough repairs by reinforcing the mainframe and renewing the floor crossmembers and crossmember bracings.

The lowloader was bought 2nd hand in the Netherlands. No further major repairs or improvement were necessary on the other plant.

ad 2/3. Metal / Wood Construction Work

A container was transformed into an office container for the Christian Council. The Christian Council paid for this work.

The cost of the transformation is ± DFL 2500-3000. For the big store a profile steel and galvanised pipe storage shelf was sealed off with iron netting and a door because it is placed under the parking shed.

Chapter 2. Halfyearly January 1991

2. RELATION ARCHDIOCESE - VWR PROJECT

2.1. Archdiocesan Development Committee(ADC)

The ADC met on July 3rd, August 8th, October 31st and December 4th. The last meeting was specially devoted to discuss the conditions of service of Archdiocesan Development workers. The others were more regular ones. The results of the 3rd July were already included in the June report so it will not be worked out here in this report.

The main issues were:

- The Membership of the managers of the handpump maintenance unit and a representative of GW&SC to the WSC has been effective from September onwards. From August onwards only the project manager of VWR will have voting rights.
- The ADC agreed upon the proposal for TOR and budget for the Archdiocesan water coordinator and it was sent and approved by Cebemo. An advertisement has been published in all the parishes but not much reactions were yielded. In the first semester of 1991 this vacancy will hopefully be filled.
- A meeting was held with the CRS (Catholic Relief Service) to get to know each other better. Concerning the project it became clear that no funding support for the VWR programme would be possible.
- The WSC was charged to think out ways to make the VWR project sustainable.
- The meeting of December 4th was solely devoted to the discussions of the conditions of service of Archdiocesan staff like: Tasc, Taap manager and his assistants, Development Coordinator, his assistant, Womens Coordinator, Health Coordinator, Education Coordinator and any other office created and accepted as such. It is not automatic that the VWR project manager's position is such an office and depends on the then present situation. Salaries are a bit lower than in VWR and no accomodation or transport facilities for private use are assured. Payment of salaries during sickness and pension benefits are better than in VWR-project.
- The WSC is charged to come out with a manpower planning to show how and when (expensive) expatriate assistance can be phased out.
- All sections of the Archdiocese should present their proposals for before the next meeting in February or March 1991 a long term policy.

2.2. Water Steering Committee (WSC)

The WSC met 2 times this semester on 22/10 and 28/11. The broader set up of the WSC led to the discussion of other than VWR issues. The following issues were discussed and decisions taken where necessary.

- Selection of new villages in October and November. As a result of the expectation that the project should minimize expenditures until the budget for '90-'94 has been agreed upon by Cebemo was decided to select villages in the Tolon Kumbungu area or near Tamale. Together with the already selected villages before, the 90-91 programme could contain 11 villages and the 91-92 5 villages. In November when it became clear that some investments could be realised (purchasing a car) 3 more villages in the Savelugu district were selected.

1.7 Additional Activities

During this semester a telephone connection was realised. Rains often caused faulty lines but altogether it is a major improvement to the communication.

1.8 Conclusions

Uncertainty about the financial funds available during the first 5 months, influenced policy decisions greatly. In spite of the wish to start work in other districts, villages were selected in the Tolon Kumbungu area again. In the last month the picture became more clear and some investments in transport could be made so some villages in the Savelugu district were also selected.

The new programs of selected villages can occupy the project for two years if all villages pay in their contributions. At the moment of selection this was not expected. Later on the willingness to pay appeared much greater.

The activities in the field were not many; finishing and restarting of construction works by the Technical Section, slowing down of Animation activities because of non availability of villagers in the farming season and more intense activities of Workshop and Technical Section at the yard.

During this period the leaves were taken by all staff and the project closed down for 3 weeks in September. The Technical section senior staff and the expatriate had a working period but unfortunately no finished village water supply reports (VWSR) were made.

The Animation programme has not changed much but more emphasis is now coming on maintenance and follow-up activities.

2.6 National Catholic Service Center (NCSC)

Invariably NCSC is organising the clearing of goods and extension of visa. No assistance could be given in obtaining quota approval for the expatriate Technical Supervisor.

2.7 Tamale Archdiocesan Development Secretariat (TAMADEVS)

Mr. Mark Attabeh the Development Coordinator and Chairman of the WSC is a regular discussion partner of the management. Many issues and policy implementation are discussed. He is infact the liaison officer between the project and the Archbishop. Although the cooperation is frank and good it is no where officially written what is the official relation between this office and the project. In the present situation this office is regarded as the representative or interlocutor for the Archdiocese to the project management.

2.8 Conclusions

The ADC was very active and the WSC less with infact only one complete meeting (November 28th). Regular contacts with various Archdiocesan departments especially TAMADEVS are good cordial. No Water Coordinator has been recruited yet but fortunately the funds have been made available already to the Archdiocese.

- Mr. Daniel Bampoh of GW&SC has been invited to participate in the WSC which he did in both meetings.
- Welldigging programme.
In connection with the policy document this issue was comprehensively discussed with regard to the financial contributions from the villagers. The handdug wells are almost 100% financed by the villagers. When a village wants more than 1 well the 2nd etc. well must cost less-from Ø75,000 to Ø50,000. The development coordinator would try to see if external additional funding could be found.
- Quota approval Mr. Hufen the technical supervisor. No progress made. An application for another extension of visa for 6 months has been forwarded to the Immigration in Accra.
- Borehole paragraph of the water policy document was briefly discussed and further discussions postponed to the next meetings of 1991.
- New project document 1990-1994.
Not much was exactly known but when it was known that some investments could be made we adopted a list of what investments could be made. Start of new office building could be realized.
- It was decided to agree on a day payment for the expatriate accountant who worked 2 days/week since September.
- Support to GW&SC pipe systems for some applying villages. The WSC decided that financial support to realize pipe connection to villages could not be given.
- Salary increment for the staff: A temporary allowance of 30% of the Basic Salary plus an increment of transport allowance from Ø3300 to Ø5300/month in connection with a similar government decision.
- Contract fee for an Animator replacing temporarily the senior Animator who is in hospital.
- TOR for the Assistant Project Manager were analysed and approved. Recruitment could then start.
- The final document and TOR of the Water Coordinator was presented.

2.3 Primary Health Care(Holy Cross PHC Unit)

The PHC unit was invited for a two-day workshop on Water-Education for health but did not participate. Through this unit a nurse-animator was attached to the project. He is to handle the water hygiene and maintenance topics in the future.

2.4 Parishes

In this period the contacts between the project and the parishes was of a rather low intensity. No major events have occurred.

2.5 T.A.S.C

The cooperation is even more intensified. A new telephone installation at the project can also be extended to the buildings of T.A.S.C. The bill for electricity was not yet paid for but this does not influence our cooperation. In August we said farewell to Mr. David Millar who was going abroad for studies. We welcomed a new Agricultural Asst. Coordinator Mr. Terbobri and the new TASC Manager Mr. Liekuu. We have enjoyed the same good cooperation as with Mr. Millar.

3.7 Conclusions.

A variety of organisations are in contact with the project. The contacts with the district secretaries have not been intensified. The relations however are good.

Concerning the external contacts one can say that it was a quiet semester.

Halfyearly Report VWR July - December 1990

3. EXTERNAL CONTACTS

3.1 Ministry of Health (MOH)

The maintenance training course of the members of the different water maintenance committees finished. All the participants were very positive about this course and for another set of new villages this course will be organised in the coming period.

The Danish supported laboratory for research on Guinea Worm and Bilharzia continues to cooperate in the field of cyclop sampling from various dams. The laboratory proposed not to bill the sampling to the project anymore and it was accepted. The project in return assists the laboratory in some calculations of water quantities of ponds and lending out a boat including its transport with project vehicles.

3.2 G. W. & S. C.

The GW&SC has now a member in the WSC in the person of Mr. D. Bampoh the rural water engineer. Through him, the project dialogues with the corporation.

3.3 Association of Church Development Projects (ACDEP)

Several times the snr. Animator assisted in committee meetings to establish training programmes for the social sector. One workshop for project managers was organized but the information came in too late to consider participation.

3.4 P.N.D.C. Secretaries

At the beginning of the working season (November) the project manager visited the district secretaries of Tolon and Tamale. The issue discussed was the programming of the dam construction in the two districts. In Tolon the problems of the villages, Nafram and Yepiligu, was on the Agenda. A meeting was organized by the District Secretary between the district, the project and representatives of the two villages. The village of Yepiligu did not send a real representative delegation and after a speech by the District Secretary the meeting was adjourned. The problem is still not solved and the CDR Regional Organiser is still working on it.

3.5 NORRIP

Except for the information flow through Mr. B. Anamoh no further contacts were realised this semester.

3.6 Others

The commercial officer of Volta River Authority organising the electricity supply in Tamale contacted the project. As a result of our application to be connected they brought us together with Omnibus services authority and Gbeewa Engineers, a heavy equipment seller; who were also interested in a connection.

It was only in January 1991 that a specification of the materials needed was given. The project will ask quotations of prices to establish this line. When those quotations are in the three parties can sit around the table to discuss who can execute the project. The project has to make an agreement with TASC and Br. Trevor's Workshop to decide on how to divide the costs.

In July, he still worked full time and in August he went on leave. The local accountant took over gradually but at the end of this semester many daily tasks were still performed by the expatriate. In the coming months the emphasis will be laid on the taking over.

4.3 Animation Section

One of the Snr. Animators was involved in an accident in July and has since then been in Hospital. From January onwards a temporary replacement will be employed.

A British lady was approached to replace the present Sawa Animator because she will leave next year.

It was not clear whether Cebemo would accept a Sawa replacement but the present Snr. Animator is not yet trained well enough to take over. For the extra car in the section a driver from the Technical Section has been "borrowed".

4.4. Technical Section

The organisation chart was officially neither changed nor practically respected.

The Technical Supervisor and the two seniors each did the design as well as the supervision of the construction work. One of the senior engineers did not fulfil the expectation. His contract which ended 31st December was not changed into a permanent employment nor extended.

A manpower planning has to be presented soon. The expectation is that more than two senior staff will be necessary. The laboratory should be headed by a senior staff and Mr. John Addey could fill this post after adequate training in hydrolics and water quality control. The idea is that in the field of design and construction two seniors are needed in addition to the post of section head.

In total 5 people left the technical section and 3 new staff were employed including a National Service man who assists in the laboratory.

The surveyor, who was disappointed at not being promoted to a senior staff position and left, will hopefully soon be replaced.

During the intensive work period three casual masons were employed. The policy here is that if those casuals are needed for more than 7-8 months a year we will have to employ them on a permanent basis.

In total 29 staff (including the expatriate) are working in the Technical Section, leaving 3 vacancies unfilled (surveyor, snr. engineer, pump operator constr. unit II). The Handug well programme started its work in the Gushiegu district and an assistant welldigger has been employed on contract basis for 8 months.

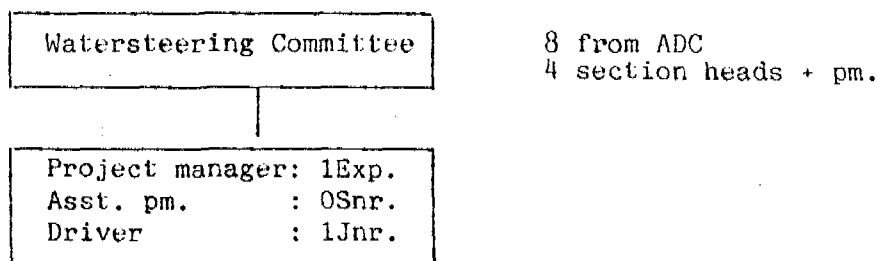
4. PROJECT ORGANISATION

This chapter deals with the internal organisation of the project. The organisation charts will be given here only if changes have occurred. In the July report all charts will be given again. Each paragraph deals with a section of the project.

The project is made up of four sections headed by the project manager.

4.1 Management

The organisation chart is presented below. For a better understanding of the number of people working in the project and to group in this chart the Administration which consists of Finance & secretariat plus the Security.



| <u>Animation</u> | <u>Technical</u> | <u>Workshop</u> | <u>Administration Finance & secretariat</u> | <u>security</u> | <u>Handdug well programme</u> |
|------------------|----------------------|--------------------|---|-----------------|-----------------------------------|
| 1 Exp. | 1 exp. | 1 Exp. | 1 Loc. Exp. | | 1 Snr. |
| 2 Snr. ** | 2 Snrs. * | 2 Snrs. | 1 Snr. | | 1 Jnr. |
| 6 Jnr. | 14 Jnrs. 12 Lower | 8 Jnrs. 3 Lower | 6 Jnrs. | 3 Lower | |

The present staff as at 1/1/91

5 Expatriate(1 on partime)
7 Seniors*
35 Juniors
18 Lower
65 Staff

and in future:

0 Expatriates
9 Seniors
37 Juniors
21 Lower
67 Staff.

Plus regularly some (4-6) casual masons + labourers.

* A senior in the TS was on contract basis up till the end of December and did not meet the expectations. He was not offered an appointment and so left the project.

** Infact two senior Animators are connected to the project but one snr. Animator had a motorcycle accident in July.

4.2 Administration

During this semester no changes in staff occurred. For an organisation chart I refer to the January-June 1990 halfyearly report.

During this semester the expatriate accountant reduced his assistance to two days per week as from September.

Table: 6 List of rolling fleet and plant as at 1:1:91

| <u>Description</u> | <u>Brand</u> | <u>Type</u> | <u>Quantity</u> |
|------------------------|-------------------|--------------|-----------------|
| Wheelloader | Caterpillar | 936 E | 1 |
| Bulldozer | " | D6H | 2 |
| Excavator | " | 215 C | 1 |
| Compactor | Bomag 172 D | 1 | |
| Tipper truck | DAF | 1800 | 1 |
| Multipurpose truck | DAF | 1800 | 2 |
| Motorpump | Lister | TR3/J156 | 1 |
| " | " | L.V1/J70 | 2 |
| Generator | " | 27, 12, 7KVA | 3(1 TASC) |
| " | Yamaha | 4.7 KVA | 2 |
| Aircompressor | Ingersollrand | | 2(2 TASC) |
| 4WD pick-up | Nissan | Patrol | 2 |
| 4WD station wagon | " | " | 3 |
| 2WD pick-up Doub. Cab. | Nissan | | 1 |
| Motorbike | Honda | 100 | 7 |
| Motorbike | " | 125XL | 6 |
| Concrete mixer | Briggs & Stratton | | 3 |
| Plate compactor | Bomag | BPR 50/55D | 1 |
| Vibromax roller | Bomag | | 1 |

In the project document phase II '90-'94 the purchase of two 2WD cars was foreseen in '90-'91. As it is now no purchase of cars will be necessary before the rainy season of '91. Plans are made to purchase two Honda CG 125 motorbikes to replace old motorbikes. This will be done in January 1991.

4.9 Conclusions

Fluctuations of staff were not many this semester. No new senior staff has been employed but one senior engineer left and the sick senior Animator will be temporarily replaced.

It can be more or less stated that the project staff is reaching its required level. In the Technical Section the number of masons is filled by employing casuals.

4.5 Workshop

No change of personnel has occurred in the permanent staff of this section. Mr. Peter Azombila, working on a contract has been offered a permanent appointment as from 1-1-91. The trainees from Nandom are regularly changed every 3 months.

No indications are there that the setup has to be changed. A carpenter is working on contract basis on a variety of jobs. Sometimes he works as a casual. Up till now a choice was made not to employ a carpenter on a permanent base for several reasons:

1. It is unsure whether there will be constant work for a carpenter in the longrun.
2. We donot want to expand the number of staff.
3. The long-run carpentry work of making wellcovers is easy to handout.

4.6 Infrastructure

This semester some unfinished gutters around the compound have been completed. The result was really notable. The culvert from the Yapei Road proved to be too small. The Yapei road is currently rehabilitated by Taysec and when contacted it is likely that they will build a larger one.

Near the house of David Millar a culvert has to be made to avoid spilling of the gutter there into the TASC yard. The floor under the parking shed has been concreted. The gutter infront of the mainstore and parking shed has been made.

4.7 Purchase of Project Goods

This semester, like before, a regular flow of goods was received from the following containers:

| | | |
|--------------|------------|----------|
| CAP 73 | Arrived at | 3-8-90 |
| CAP 74 | " " | 24-8-90 |
| TAAP 24 | " " | 22-10-90 |
| TAM Water 12 | " " | 31-10-90 |
| Damongo 1 | " " | 28-11-90 |
| CAP 77 | " " | 20-12-90 |

A list of orders made this year is given in Annex I.

4.8 Transport and Equipment

In this semester a new double cabine 2WD Pickup Nissan was purchased. Also a new compactor has arrived which was ordered in June (order 217).

The use of the equipment has been listed in paragraph 1.6.
Below a list of the rolling fleet has been given.

6.

PLANNING

6.1 Animation Section

Orientation visits to all new applicants for dams will probably not be done. The now selected villages can fill the project programme up till 1993 wet season. It can give too much expectations.

Weekly meetings with the TS will be organised to discuss technical alternatives. In April 1991 a Water Quantity Observation will be done in Dimabl for three days.

The labour organisation will involve a full day's visit by an animator every fortnight to a construction site.

The Water Hygiene Education and Maintenance Programme will be continued and further elaborated. A new training session for maintenance team members at the Tolon health post will be organised.

The villages invited will be Buyili, Kpachiyili, Gariziegu, Shigu, Chanayili, Yong-Dakpemyili and Tolon Cheshegu/Gundaa. The staff of different health posts under which these villages fall will be invited to participate; these are Bulpela(Tamale), Tolon, Kumbungu and Sanerigu. The Presbyterian health team who works in Tolon Cheshegu will be invited too.

The usual guinea worm surveys will take place in all the new villages and in some of the old villages. A Dutch student will come to do a research into the incidence of guinea worm in the coming period.

Table 7 shows the planning chart of the Animation Section.

5. OTHER PROJECT INPUTS

5.1 Backstopping from the Netherlands

From the SAWA Head Office the following backstopping came to the project.

- Sending related articles and reports in the field of Guinea Worm eradication, study books for the Workshop section and on technical subjects.
- The financial summary as at 1-7-1990.

Monitoring mission S. Dermijn SAWA.

The project coordinator in the Netherlands, Simon Dermijn made his annual monitoring mission to Ghana from 19th of June to 11th of July. The results of this mission were reported in the last halfyearly report of January-June 1990.

5.2 Training

The Animation Section Organised

A two-day workshop on "Water Education for Health" led by the Wa Cultural Animation team in August. This was immediately followed by a DELES course for leadership skills for five days led by the Institute of Adult Education.

The courses were felt to be very useful for all members. Other organisations like Catholic PHC unit of Holy Cross, Tolon Healthpost, MOH, Women and Development coordinator of the Archdiocese and Oxfam were invited.

However only the Oxfam staff participated in both courses. Women & Development participated in Deles.

The Workshop section could not organise a training at DAF/Leyland and at Tractor & Equipment in Accra because these organisations did not offer the possibility.

The senior mechanic Mr. Robert Anasigre followed a course at MUDP in Accra on "the practise of supervision". He estimated the course as very useful.

The Technical section organised a six-week training for the new draughtsman in Accra at AESC. The training of the masons at Tamale Vocational Training Centre could not take place because the training fee was too high.

An inservice training was given by the surveyor Mr. Charles Taylor on different surveying topics, and the different instruments to be used.

Four Technical Section members participated in the course over a total of 10 days taking 20hrs. approximately.

Table 7.

Planned Activities

| Villages | A C T I V I T Y | | | | |
|-----------------|---|--------------|----------------------------|---------------------------------------|---------|
| | Preparation Social Survey discussion alternative | Construction | Water-hygiene education | Maintenance training/ follow-up | monitor |
| Gbirimani | | | | | |
| Tibogu | | | | X | X |
| Aseyili | | | | X | X |
| Adumbliyili | | | | X | X |
| Dimabi | | | | X | X |
| Garizegu | | | | X | X |
| Chagnayili | | | | X X | X |
| Shigu | | | | X X | X |
| Buyili | | | | X X | X |
| Kpachiyili | | | | X X | X |
| Nafram | | | | X X | X |
| Yong-Dakpemyili | | | | X X | X |
| Cheshe | | | | X X | X |
| Yepeligu | | | | | |
| Kunguri | | X | X | | |
| Tolon-Cheshegu | | X | X | X | X |
| Gundaa | | X | X | X X | X |
| Kukulun | | X | X | X X | X |
| Jekpahi | | X | X | | |
| Kukuo | | X | X | | |
| Gizaa | | X | X | | |
| Bagon | | X | X | | |
| Voggu-Gundaa | X | | X | | |
| Namdu-Kurigu | X | | X | | |
| Kpendua | X | | X | | |
| Zion | X | | X | | |
| Dasuyili | X | | X | | |
| Tiboguuayili | X | | X | | |
| Tingolin | X | | X | | |
| Limo, Cupanrigu | X | | X | | |
| Tashegu | | | X | | |

A very important issue is the manpower planning from which conclusions can be drawn if a new SAWA assistance in this section is needed.

6.2 Technical Section

The Technical section has now 1 senior staff and the Sawa man to organise the construction works, make designs etc. This gives a bad perspective for the coming time concerning the preparations of design and V.W.S. Reports. It is expected that the one preparing the design knows what to do but as soon as he is not available (sickness for example) the other staff is not able to guide correctly the works. The new foreman Mr. Albert Yin needs close supervision as he is new in this type of work. The neat finishing touches to be done when finishing a reservoir needs also close supervision which will be hardly possible in the coming time.

The technical halfyearly report gives no details of planning but several designs are on their way. Nafram - It is not sure if the social tension will be solved.

Finishing Dimabi wells and fence.

Tolon Cheshiegu, Kukulun which will be separated into Kukulun/Jakpahi and Gizaa/Bagon/Kukuo, Kunguri, are dams on the programme.

The practical order will be determined whether the villages have paid their contributions. The employment of another senior engineer is also an important topic.

A manpower planning has to be made and discussed in the W.S.C. The general idea for us now is that the section will certainly need more than 2 senior engineers.

6.3 Workshop

Besides of the normal maintenance and repair on the plant several other topics will be tackled.

- A manpower planning has to be made.
 - A handing over report for the successor of the SAWA staff member if the WSC decides its necessity. This will mainly follow from the conclusions drawn in the manpower planning.
- The local senior staff has to take over more and more responsibilities. This can lead to a situation where the SAWA workshop manager will have more time available for training activities.

6.4 Administration

During this coming semester the local accountant has to take over all daily activities the head of section has to perform. Mr. Honkoop will concentrate on:

- Improvement of after construction calculation in relation to a revised cost calculation document.
- A financial review of the 1st phase of the project to analyse where the money spent during the first phase went into, like;
Investments in Buildings, Equipment, Village dams and Stock.
Staffing cost, Salaries, Training etc.
Overhead cost.
Animation cost.

ANNEX I

LIST OF ORDERS

| Date | Order | Description | Codes | Section | Remarks | Amount (DFL) | Date |
|---------|---------------|---|-------------|---------|---------------|--------------|--------------------|
| 8-3-90 | 190 | Secondhand 20ft. containers | 4202 | AS | TASC | 200.000.- | 2-4-90 |
| 8-3-90 | 191 | Spares for Ram DAF Tipper | 5203 | WS | CAP73 | 3500.- | 3-3-90 |
| 26-3-90 | 192 | Fuel 30.000Ltr Goil | 5201 | ALL | Tamale | 2000000.- | 27-3-90 |
| 4-4-90 | 193 | Spares Honda 100XL | 5203 | WS | TAMP 24/TW 4 | 6351.- | 22-4-90 18-3-91 |
| 9-4-90 | 194 | Spares Caterpillar Unatrac | 5203 | WS | Cap73 | 10500.- | 3-3-90 |
| 9-4-90 | 195 | Spares for Zeca Compr Tester | 5203 | WS | Cap73 | 613.- | 3-3-90 |
| 9-4-90 | 196 | Spares for Daf & Nissan | 5203 | WS | Cap 72 | 6500.- | 17-7-90 |
| 9-4-90 | 197 | Spares for IR Compr/Bomag Comput | 5203 | WS | Cap 72/TW 12 | 3295.- | 17-7-90 |
| 9-4-90 | 198 | Suction line Big motorpump | 4202 | TS | GW 50 | 1500.- | |
| 9-4-90 | 199 | Hekla BV spares battery filter | 5203 | WS | Cap 74 | 280.- | 24-8-90 |
| 9-4-90 | 200 | Monster Spares Welding Electr. | 5203 | WS | Cap 74 | 2800.- | 24-8-90 |
| 10-4-90 | 201 | GBM DAF Spares Axleshafts | 5203 | WS | Cap 72 | 11000.- | 17-7-90 |
| 12-4-90 | 202 | Spares parts for Honda 125XL | 5203 | WS | Cap 74 | 5000.- | 24-8-90 |
| 18-4-90 | 203 | Laboratory Consumables | 5100 | TS | BYAIR | | 28-11-90 |
| 18-4-90 | 204 | Items for Brother Trevor | - | - | TW 12/14 | 9000.+ | |
| 2-5-90 | 205 | Fuel 30,000Ltr. Goil | 5201 | All. | Goil. | 2000000.- | |
| 11-6-90 | 206 | 3 Cassettes about asking, listening/speaking | 230 2142 | All. | HANS 120 | 130.- | 22-10-90 |
| 20-6-90 | 207 | Spares for Gen. I-II-III | 523 | WS | TW 13/ | 6660.- | 20-12-90 |
| 20-6-90 | 208 | Monster tools Workshop | 420 | WS | TW 12/TAMP 24 | 3500. | |
| 20-6-90 | 209 | Monster materials & consumables | 550/560 | WS | several items | 3888.- | 22-10/20-12 |
| 20-6-90 | 210 | Nissan Patrol 160 SPARES | 533 | WS | TW 12. | 1545.- | 31-10. |
| 20-6-90 | 211 | Bomag Plate Compactor Spares | 523 | WS | Cap 77. | 2345.- | 20-12. |
| 20-6-90 | 212 | Spares Wheelloader & Excavator | 523 | WS | TW 12. | 16000.- | 31-10. |
| 20-6-90 | 213 | Spares DAF 1800(Air compressor) | 523 | WS | TW 12. | 11360.- | 31-10/18- |
| 25-6-90 | 214 | Office consumables | 540 | OFF | TAMP 24 | 200.- | 22-10 |
| 25-6-90 | 215 | Video apparatus | 420 | AS | Cancelled | 13000.- | |
| 26-6-90 | 216 | Calculators Blomenstein | 420 | OFF | TW 13 | 380.- | 22-10/6-2. |
| 27-6-90 | Roller 217 | Vibrator Compactor Vibromax with spares. | 420 | TS | Cap 77 | 2450000 | 20-12-90 |
| 27-6-90 | 218 | Proforma Invoice Hekla BV. spares | | | | | |
| 5-7-90 | 219 | Hekla;tyres Daf,tyres pickup | 523 | WS | TAMP 24 | 19506.- | 22-10 |
| 10-7-90 | 220 | Lubricants Mobil | 520 | WS | Tamale | 11300 | 13-7 |
| 12-7-90 | 221 | Fuel | 521 | W/S | " | 2.4mln | 13-7 |

6.5 Management

The normal activities in maintaining the external contacts and the coordination of the activities of the different sections will continue.

More specific topics are:

- The water policy document
- The manpower planning
- A more elaborated design of the future set-up of the project.
- Recruitment of an assistant project manager
- Opening of a 2nd Forex Account
- Coordinate the building activities for new office + staff houses
- Coordinate the building of the electricity connection.

| Date | Order | Description | Codes | Section. | Remarks | Amt. (DFL) | Date Arrive |
|----------|-------|---|---------|----------|---------------|------------|-------------|
| 23-7-90 | 222 | First aid kit/measuring tape | 420 | TS | Partly Cancel | 150 | 28-11 |
| 13-7-90 | 223 | Tents, Raincoats, Concrete CH. | 420 | TS | TW.12 | 4016 | 31-10 |
| 25-7-90 | 224 | Deepfreezer for Dr. Abdulai | - | - | TW.12 | 1000 | " |
| " | 225 | Office stationery | 540 | TS | Tamale | 511 | 10-9 |
| 25-7-90 | 226 | Karchercher Petrol HP water pump spares Honda 6x100 | 523 | WS | TW.12 | 500 | 31-10 |
| 21-8-90 | 227 | Daf Hydrualic spares | 523 | WS | Damongo | 3000 | 28-11 |
| 17-9-90 | 228 | False injector Cat Unatrac | 523 | WS | | 200 | In proc |
| " | 229 | Hekle spare Honda 125 | 533 | WS | | 2500 | " |
| 23-8-90 | 230 | Air Conditioner Window M. | 410 | Coord. | TW.13 | 3746 | 6-2-91 |
| 12-9-90 | 231 | Sika concrete treatment pit | | WS | Damongo | 200 | 28-11 |
| 20-9-90 | 233 | Mobil grease mobilplex 48 | 522 | WS | Tamale | 2175 | 19-12 |
| 25-9-90 | 234 | Monster spanners for barbed wire. | 550 | TS | Cap78 | | 25-2 |
| 26-9-90 | 235 | Hekla Hose for HP water clean | 523 | WS | Cap78 | 410 | 18-1-9 |
| 2-10-90 | 236 | Veerefelt Daf spares Ball joints Gear linkage | 523 | WS | TW13 | 314 | 6-2-9 |
| " | 237 | Tuex tension stablizer | 4201 | TS | TW13 | 992 | 6-2-91 |
| " | 238 | Blowmesyn Handbook cartridges instr. book Toshiba | 4201 | AD | TW13 | 1500 | |
| 10-90 | 239 | Hard PE pipe black Ø75mm Co 803387 | 450 | TS | TW13 | 5290 | 6-2-91 |
| 10-10-90 | 240 | Books for T.S. | 490 | TS | In proc. | 200 | |
| 23-10" | 241 | RV Seenus Almere Lab Chem. | 550 | TS | TW14 | 280 | 18-3-9 |
| 25-10 " | 242 | Blommensteyn consumables off | 540 | Off. | TW13 | 1320 | 6-2-91 |
| 26-10 " | 243 | " Drawing materials | 420 | " | TW13 | 776 | " |
| 2-11-90 | 244 | Urgent spares Daf gearbox + books | 523 | WS | DHL | 1651 | 18-12- |
| 4-11 " | 245 | Monster Consumables/Materi. | 550 | WS | Cap78 TW11 | 1300 | 25-2 " |
| " | 246 | Monster Tools | 420 | " | Cap78 TW14 | 1833 | 25-2/18- |
| " | 247 | Wash Reports SAWA | 490 | AS | | 200 | |
| 2-11 " | 248 | Veerefelt Daf spares Cooling water pump | 523 | WS | TW1 | 4877 | 18-3-9 |
| 3-11 " | 249 | Brinkman&N parts book Bomag compactor | 523 | WS | Cap78 | 100 | 25-2 " |
| " | 250 | Hekla oil filters etc. | 560 | " | TW13/14 | 5253 | 6-2/25= |
| 10-11 | 251 | Tuex BV Telep. watertaps | 410/540 | All | TW14 | 404 | 18-3 |
| 12-11 " | 252 | Excavator spares T&E Accra | 523 | WS | Accra | 807 | 19-2-9 |
| 18-11 " | 253 | Hekla HD Grease Brake fluid | 532 | WS | TW14 | 2285 | 18-3-9 |
| -10-90 | 254 | Slide projector statie converter projection screen | 420 | AS | TW14 | 2188 | 18-3 |

| Date | Order | Description | Codes | Section. | Remarks | Amt. (DFL) | Date |
|---------|-------|--|---------|----------|---------|------------|---------|
| 1-12 | 255 | Monster consumables | 550/560 | WS | TW14/15 | 3231 | 18/3/1 |
| " | 256 | Monster Tools etc. | 420 | WS | TW14/15 | 1625 | 18/3/10 |
| 5-12 | 258 | Diesel fuel Coil 30,000ltrs. | 521 | All | Tamale | Ø5.7m. | 19-12- |
| 6-12 | 259 | Urgent seals excavator | 523 | WS | DHL | 200 | " |
| 1-10-90 | 260 | Barbed wire spanner Monster(Order 234) | | TS | | 60 | |
| 6-12 | 261 | Monster valves nails Brushes etc. | 550/560 | TS | TW14/15 | 3912 | 18-3/1 |
| " | 262 | Tuex BV HPE pipe+couplings | 450 | TS | TW15 | 2592 | 16-4 |
| 19-12 | 263 | Hekla tyres Gazelle bikes Oil filters lee bar | 533 | All | TW14 | 526 | 18-3 |
| 20-12 | 264 | B&N RH Recorders | 523 | WS | | 750 | |
| 24-12 | 265 | DPA Penstandard & pensets | 590 | All | | ? | |
| 22-12 | 266 | Blommestejn office consumab. | 540 | ANS | | ? | |

Post
Stamp

SAWA - Consultants
Schoolplein 7
3581 px Utrecht
The Netherlands.

Post
Stamp

Village Water Reservoirs
Archdiocese of Tamale
P. O. Box 163
Tamale. Ghana.

VILLAGE WATER RESERVOIRS
TAMALE GHANA

I am interested to receive the following documents:

- Technical halfyearly report semester
- Animation " " " " "
- Workshop " " " " "
- Water Supply Report of Village
- Others

Name:

Address:.....

Make it black to get the wished document

VILLAGE WATER RESERVOIRS
TAMALE-GHANA

I am interested to receive the following documents:

- Technical halfyearly report semester
- Animation " " " " "
- Workshop " " " " "
- Water Supply report of village
- Others

Name:

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Make it black to get the wished document