

LIDEP

Lushoto Integrated Development Project

Report

January to March, 1970

by

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General Development:

In January, 1970 the second meeting of the Board of Governors was held in SONI. The general policy for the project, which had been proposed in a draft report to all members of the board was accepted with slight modifications.

A number of sub-committees was formed to deal with questions of staffing, particularly Tanzanian counterpart positions, and the planning and building of a Rural Training Centre at MABUGAI.

The task to recruit counterpart personal was started immediately: up to now we were not able to fill any of these positions. The work of the sub-committee on RTC MABUGAI has commenced: we have now detailed views from Maendeleo and Kilimo on which basis syllabi for training will be made and plans for the physical facilities. It can be expected, that by end of April, 1970 a detailed proposal can be given to the Board of Governors.

Soon after the meeting in January, 1970 the Minister of Health and Social Welfare visited LUSHOTO and saw also the proposed site of MLOLA Health Centre. As a result of this visit his Ministry is apparently prepared to give medical development in LUSHOTO district a higher priority and consequently funds for the establishment of RHC MLOLA have already been allocated for the financial year 1970/71 instead of 72/73. The Minister expressed his wish that LIDEP would take up the construction of RHC-buildings. Negotiations regarding this project are under way between Board of Governors LIDEP and Healthmin.

The project is now grouped into 16 sections which are in most cases interlinked. For reasons of convenience we report on each section separately. Maps of LUSHOTO district are attached in order to make clear in what locations each section operates.

1. Project Administration

Mr. A. Kneer, the German project administrator started work on 17th January, 1970. He was mainly concerned setting up the project's administration. His work is mainly concerned with detailed book-keeping, close co-operation with headquarters of CDTF in Dar es Salaam, importing of equipment, etc.

During February, 1970 the administrative headquarters of LIDEP were established on the upper floor of the project's garage. These offices consist of 5 rooms:

1. Administrator
2. Managing Director and Medical Office
3. Building Section and Metal Workshop Manager
4. Laboratory
5. Data Evaluation Centre

During March an Assistant Accountant (Mr. Shauri) and a Secretary (Miss Tsakiris) were recruited. Both will start work in May, 1970.

2. Max Planck Laboratory

The laboratory in BUMBULI was mainly occupied with analyses and evaluation of 4 research projects:

- a) Food analyses continued and were mainly concerned with the diet of the Soni Rehabilitation Centre and an analysis of Makadamia nuts.
As a result of these investigations it was decided that the diet of the children in the Soni Rehabilitation Centre will be enriched with amino acids and in a second stage with lacking B-vitamins. Objective of this exercise is to see whether this food supplementation will lead to a further improvement of anthropometric development.
- b) Analysis of sisal juice. This long standing project of investigation into utilization of sisal waste was further delayed by the fact that a container with deep frozen material arrived in broken condition in Germany. It was now arranged with Central Veterinary Laboratory in Dar-es Salaam to send 20 litres of the material in deep frozen plastic bags.
- c) Analysis of clinical data from the Ismani Survey was continued. It is expected that a preliminary report of the findings will be available together with the results of BRALUF during summer, 1970.
- d) Two full examinations were made of the children in SRC. In March venous blood was obtained for vitamin A analysis. The former findings were reviewed and compared with the recent results.
No further anthropometric improvement was observed whereas bio-chemical values remained at an average high level.

At end of March, 70 the computer evaluations of a longitudinal study into progress of children attending UFC's was partly finished. The data are reviewed at present.

Discussions were held with the manager of the fertilizer plant in Tanga in order to do experimental fertilization of small-holder farms in the district. This would require a series of soil analyses which could not be carried out with the presently available equipment.

Dr. Kohut from the Regional Office WHO visited the project in order to discuss assessment of chemical and biological quality of rural water supplies.

The Minister of Health and Social Welfare, Mr. Sijaona, paid a short information visit.

Problems of food analysis were discussed with Mr. Shephard from EAARO, Nairobi.

The establishment of a data store on nutrition was discussed twice with Mrs. Ackhurst, Secretary of the Tanzania Nutrition Committee.

Several other officials from Tanzania and abroad paid general information visits.

Dr. Oltersdorf went several times to Dar es Salaam to attend meetings of Tanzania Nutrition Committee and to discuss problems with Kilimo and the University.

A new telephone line and a new water connection was installed in the Laboratory.

Staff: No changes during January to March. Mr. Malonga from the Evaluation Unit is being trained temporarily at BUMBULI.

Statistics of Laboratory investigations see appendix 1.

3. Under Five's Clinics

The UFC activities were considerably expanded in the first quarter of this year. A new UFC-team was formed which operates under Mr. Mndeme in Mlola division. This work started on 15th March, 1970 after a initial base line study was carried out in January, 1970. This team operates under extremely difficult conditions: roads are sometimes not passable, no cold-storage facilities for vaccine exists, and housing for the staff is difficult in some villages. However, the response of the population and the 10-house-leaders is extremely good. In one clinic, in MLOLA, over 300 children attended on one day.

Simultaneously with the clinics a small Rehabilitation Unit was started in MLOLA. In this village the amount of clear-cut PCM was 18% in the preceeding survey. This scheme is thought to be an experiment: it is run by one of the girls, who have been trained in the Soni Rehabilitation Centre. Due to the miserable condition of the children we started feeding them with dried skimmed milk and maize. The mothers of the children supply fruits and fire-wood for the kitchen. Two local girls were recruited in Mlola for training and assistance. We think that our former trainee from Soni operates this newly established unit quite successfully.

(see attached letter - appendix 2)

One clinic in SONI area was abandoned due to low attendance and to the fact, that this clinic was located too close to the clinic at SONI. Two new clinics were established, one at UBIRI and another one at VUGA.

No changes were made in BUMBULI division.

Main emphasis in vaccination was given in all 3 teams to D.P.T. 17 clinic points were visited regularly by end of March, 1970. A total of 132 clinics were held which were attended by 14429 children, 3312 D.P.T.-vaccinations, 269 Smallpox- and 22 Polio-immunizations were given. The average attendance per clinic day was 109 children. (see appendix 3)

Staff: 1 dresser was recruited in Jan., 1970. The first trainee for the post of a non-medical nutrition assistant was filled with an ex-form IV-girl.

4. Soni Rehabilitation Centre (SRC)

The average attendance in the Rehabilitation Centre, Soni was continued to be very high after 9 months.

Two full examinations were made during this period, which revealed further clinical progress of the children although of a slower rate. A detailed chemical analysis of the food revealed some nutrient deficiencies. The missing amino acids and vitamins will be supplemented in future. The main problem seems to be that the majority of the children contract repeatedly worm infections, particularly hook-worm.

Major problems arose from the fact that the present water supply of the centre is not sufficient. Plans are made at present to improve the situation.

A programme for training mothers in improved house-keeping has been started successfully. A trained home-craft teacher, Miss Sophia Mpiga, has been recruited recently and will start shortly courses in one village. Agricultural education, particularly vegetable gardening has not started due to the fact, that the farmers did not yet move out of our shamba.

Another problem arose when some parents of Kigurunde and Lwandai refused to send their children to the centre. One of the parents is a balozi which makes the situation more serious. Only after attendance of all children of these villages was stopped for a week and the MP intervened, a "normal" situation could be restored. The main reason for the refusal of the parents was found to be negative influence of some witch-doctors in the area.

The over-all performance of the centre was efficient.

A second kitchen was established for training purposes. In Febr. the second group of trainees (ex-std. 7-girls) was selected from approx. 35 applications. (Examination sheet see appendix 4).

Headquarters of the UFC-team Soni was transferred to the offices at the garage.

The SRC was visited by a German TV-team and a representative from "Bread for the World".

5. Girls' and Women's Training

During March, 1970 two groups of girls, ex-std. 7, were selected for two types of training:

- a) 6 girls for training in all aspects of child-care and house-keeping to be trained on the job for 6 months in Soni Rehabilitation Centre. They will spend some time in one of the clinic teams to learn health-education, practical clinic work and home visiting. Thus it will be easier for them to do extension service in the villages later on.

During their 6 months course they will have about 20 theoretical lectures with topics ranging from hygiene to TANU-policy. It is hoped that district officials of the different departments will participate in the teaching.

- b) Another 15 girls were selected for training in a production-orientated workshop. The first subjects which will be taken up, are knitting and sewing. The products will be sold in the dukas of the district. Profits made go back to the women. Extension of this training into other crafts will depend on experience made in the first course and suggestions made by the women themselves. Start of this programme: 1st April, 1970.
Questionnaire on which selection was based see also appendix 4.

6. Rural Water Supplies

During March, 1970 the water supply system in FUNTA village was completed. The population of the area participated strongly in this self-help-project. Approx. 3000 man/days of labour was supplied by the villagers. The system is now connected with a number of taps, each of which supplies an area of roughly 10 houses. It is estimated that a population of 2500 people is served with this system. The total financial costs were roughly 10.000 shs. Rural Development Fund, Tanga supported this project with 4500 shs. and CDTF with 5000 shs.

Two more projects are in planning:

- a) in connection with the planned Rural Health Centre MLOLA it is intended to create a distribution system of the presently existing water tank in MLOLA village. In discussions with local officials it appeared desirable to plan 10 taps in the village, to connect the Primary School with the tank and replace the pipe to the cattle dip by a 1 1/2" pipe. Foreseeable costs for materials are estimated with 7000 shs. including pipes, fittings and cement. After completion it is planned to build a channel for the continues overflow from the tank to which a sewage system from the taps will be connected.
- b) the second system is planned in the village MANGA in the vicinity of FUNTA. This village presents particular difficulties. Water could be brought there by gravity only at the expense of at least 5 miles of piping. With the balozi of the village (680 inhabitants, 85 houses) it was agreed to install a handpump which will be operated co-operatively and the water be stored in a tank above the village.

Both projects are expected to start in middle March, 1970.

7. Building Activities and Vocational Training

Buildings were under construction at the following places:

- a) Reconstruction at garage and building of offices
- b) Study Centre Maweni
- c) Dormitory for Agricultural Training in MABUGAI
- d) Changes of buildings for training at SRC
- e) Several roads and bridges were repaired.

A total of 18 people were employed and 8 ex-std.7-leavers are in training.

Under a foreman (teacher) 5 trainees built within 7 weeks the raw brick building of the dormitory in MABUGAI. From the reports and our observations it appears that training commenced successfully. The trainees receive a pocket money of 80/- shs. per month and are supplied with a set of tools at the end of their training after 6 months. A similar system will be employed with new groups of trainees in other places where LIDEP erects buildings.

The other trainees are occupied at present with carpentry and designing of plans.

Office re-construction and Study Centre Maweni are ready and can be used in future.

Two staff houses are planned in MLOLA and BUMBULI. Work will commence as soon as the formal agreement with the church (Bumbuli) has been reached.

Trainees for the metal workshop and the garage have not been selected yet. We assume that training can start only in June, 1970 due to the delay in taking over the garage. A visit was paid to T.A.M.T.U. (Tanzania Agricultural Machinery Testing Unit, Arusha) in order to find out what tools would be suitable for production in our workshop.

Mr. Wöhlk also went to KEREGE in order to assess low cost housing in this Ujamaa-village. This visit was arranged by Maendeleo. At several occasions the possibility of a low cost housing credit scheme was discussed and preliminary proposals were made to KUBEL-Foundation. These were based on proposed credit schemes laid down in the second 5-year plan. Plans were drawn up for a suitable house at a cost for materials of shs. 3.100/-.

8. Vegetable Extension Services and Marketing

Initially 6 farmers were selected in the following villages: MAYO, MALINDI, LUKOSI, BUMBULI, SONI and MLOLA. Each farmer is being trained specifically in one crop, which according to our assessment will be a major cash crop of that area.

Since these farmers are to be our extension staff, they started already to recruit other farmers of their villages to participate in progressive vegetable cultivation. In MAYO, a target area for spinach and onions, 30 farmers have joined the group. Progress in this area was held up largely by the fact that some fields were damaged severely by insects. Harvesting is expected to start early April.

In MALINDI and LUKOSI the already existing group was extended to 60 participants. Initially studies in this area showed that it was mainly a suitable area for broccoli. Since this crop is new in East Africa and the market situation is not known very well, some farmers also started to plant cauliflower. In middle of March four nurseries of cauliflower and 6 broccoli seed beds were transplanted and are progressing well.

In BUMBULI the group of farmers who are planting onions has extended. No exact figures were obtained from our extension worker.

In SONI the vegetable farmers' group exists of 28 farmers now, all of them growing cabbage on shambas on an average size of $\frac{1}{3}$ acre.

In MLOLA a risky experiment was started to grow melons. All 14 people involved were informed about the fact that no experience is available in this field. Some delay occurred when the necessary amount of seeds were not available by end of January, 1970. Meanwhile 7 acres are under cultivation and harvest is expected to start end of May, 1970.

Three sprayers have been bought and are borrowed by individual farmers who are trained by our extension workers.

In the meantime we have been approached by the "balози" of several villages. Due to the extreme shortage of manpower (1 Japanese volunteer) we have agreed to make a concentrated effort in the village of MBUZII, two miles north of SONI.

While extending our UFC-system, we came across a fruit-tree nursery at MSALE (MLOLA). These trees, most of them budded, are due for transplantation. In the next meeting of the DDPC the Managing Director will propose to transplant these trees with the help of the school-children to individual homes. Training of school-teachers will be carried out by a Canadian horticulturist, who will be borrowed from Kilimo. Consent to this proposal has already been obtained by Director of Research and Training (Kilimo). Mr. Claycomb from Irente farm has already agreed to take over supervision after the Canadian volunteer's departure.

Trial into vegetable marketing has commenced successfully beginning March, 1970. Crops were taken to Kariakoo, Dar es-Salaam, by the farmers themselves. 6/- shs. per bag were deducted from the prices obtained for mileage of the lorry. The products did not come out of our extension areas, since nothing could be harvested there up to now. However, no problems with selling were encountered and farmers made profits 200 to 300% higher compared to prices obtained from middle men before.

Another inquiry is under way to see whether tropical fruits find a market profitably in Europe.

9. Bakery SONI

The bakery was re-opened on 27th March, 1970. Two people are employed on a daily basis. In the remaining days of March 240 breads were sold. For more rational distribution of the bread to the dukas a used bicycle will be bought.

Firewood is bought from the local farmers in Soni.

The wheatflour is enriched with lysine which brings up considerably the nutritive value of wheat-protein. The costs for this enrichment is almost negligible.

10. MASUMA

Masuma is produced still in small quantities and sold in a number of dukas in the district. The biggest problem seems to be that women have not cash enough to buy this children's food, since almost all packets were bought by men.

A total of 317 packs were sold in the 3-months-period. We have tried now in 1 Under Five's Clinic (MAYO) to replace the maize flour/milk mixture (which is free food, coming from USA) by the locally available Masuma.

11. MAYO Mill

The MAYO Mill is not used economically; the amount of flour milled is roughly 1000 kg per month, which is only an estimated 15% of the total consumption in the village. It might be possible that milling has decreased prior to the harvesting season which starts in May in that area. It has been discussed to establish this mill in a bigger village, possibly in MGWASHI if the uneconomic performance continues. It is also interesting that this amenity is almost exclusively utilized by people living in an area of about 2 miles radius around the mill.

12. Laboratory SONI

Miss Baars, our Laboratory Technician, was seconded to a field survey of the Zambian Food and Nutrition Commission in the Northern Province of Zambia. The Max Planck Unit had taken over an advisory function in the establishment of an Human Nutrition Research Unit. We were therefore responsible to assist training of medical field staff in ZAMBIA and organizing the laboratory in LUSAKA.

A number of discussions were held with Professor Morice King, whose "Rural Health Centre Laboratory" will be established in SONI. After the RHC MLOLA is completed this laboratory will be transferred to MLOLA. For this purpose a Tanzanian Laboratory Assistant will be trained at least for 1 year.

The costs for the establishment of this laboratory is somewhere around 6.000/- shs. After Miss Baars returned from ZAMBIA preparations for equipment orders have started.

Discussions were held with Dr. Kohut, Regional Advisor on Rural Water Supplies, WHO, to establish a training unit for the bacteriological assessment of rural water supplies at SONI in connection with our planned laboratory.

It is thought, that short training courses in this field could be given later on for M.A. students, health inspectors, etc.

13. Garage SONI and Metal Workshop

The car mechanic engineer, Mr. H. Lakus, was recruited and will start work on 15th May, 1970.

Discussions were held with Cooper-Motors to continue agencies for Landrover and VW. The present equipment of the garage was assessed by Mr. Lakus and a list drawn up for a new set of necessary tools. During his visit to Europe these tools will be ordered so training can start shortly after his return. The selection of trainees will be done after Mr. Lakus returns from Europe.

14. Study Centre Soni

The building of the Study Centre was completed by the end of March, 1970. The delivery of furniture was delayed for various reasons. Negotiations have been made with the Rural Development Group, who will conduct a study in the district, that the centre will be occupied by students and lecturers of the University College, Dar es Salaam. This group is housed at the meantime at MAWENI.

The field study will consist of two parts:

1. Intensive assessment of social and political relationships within 4 small selected communities in LUSHOTO District. It is hoped, that this study will throw some light on questions like attitudes towards socialist transformation, intensification of intercommunal labour-exchange etc.
2. The second part of the study consists of assessment of agricultural systems in the area and will be conducted on 78 points in the District.

The field study is being prepared with co-operation of LIDEP-staff and consists of a questionnaire given to balozis in the nearest village to the 78 points. It is hoped that we will find out a rather comprehensive pattern of major food and cash crops already grown in the area, the typical size and variation of arable land in each part of the district, etc.

The findings of both surveys are available to us at all stages of the research project and will undoubtedly assist greatly in further planning of extension services.

The trained interviewer personell will be taken on by Dr. Heijnen, who will be in charge of LIDEP's Evaluation Unit.

15. Seminars and Practical Courses

In January, 1970, 12 girls students of MATC, Tanga dis a 2-weeks practical course in clinical nutrition and preventive medicine in the medical department of the project. They were attached to UFC teams, the SRC and the survey team conducting a clinical nutrition survey in MLOLA division. A number of theoretical lessons was given particularly with the topics of planning and organizing MCH service. All students were asked to submit a report and to state also what criticism they had regarding the organization of our medical system. A typical example of these reports is attached (appendix 5).

Mr. Moshi attended a seminar of UWT at KOROGWE teaching nutrition to the women. He also attended another seminar for nurses and dressers at MOMBO RHC.

Dr. Kreysler went to MATI, MOROGORO, to teach methods of assessment of food consumption patterns and planning of food supplies in Ujamaa-villages to agricultural field assistants.

16. Other Activities

Dr. Oltersdorf attended 3 times meetings of the National Nutrition Committee. One special meeting was held with Prof. Kraut to discuss the establishment of a Nutrition Research Institute in connection with KCMC, MOSHI.

Dr. Kreysler attended 5 times meetings of two Sub-Committees (Health, Housing & Social Welfare; Regional Administration & Rural Development) of the National Research Plan.

A number of meetings were held with Lady Chesham, CDFF, and Mr. Shabani, Chairman of the Board of Governors.

Three meetings were conducted in DAR ES SALAAM and SONI with BRALUP and the Principal Secretary Devplan, Mr. Msuya, to discuss the establishment of an evaluation unit in SONI.

Mr. Wöhlk and Dr. Kreysler attended a regional meeting of the German Volunteer Service at MOSHI. Topic: Future regional planning and guide lines for German volunteer personal.

Three staff-meetings were held at SONI, which were attended by all German and Tanzanian section leaders. The first meeting was chaired by Mr. Kiefer (KUBEL Foundation). The meeting in March was attended by Mr. G. Cunningham of Ujamaa Division in Maendeleo, who gave a lecture on present development of Ujamaa-villages in other regions of the country. This meeting was also attended by District Rural Development Officers of Korogwe and Iushoto.

These staff-meetings are held monthly to discuss current problems of the different aspects within the project and also to keep everybody informed about progress and difficulties in other sections.