GJ-20 Lushoto Integrated Rural Development Project 25 July 1972 P.O. Box 4080 Dar es Salaam, Tanzania.

Mr. R.H. Nolte, Institute of Current World Affairs, 535 Fifth Avenue, New York, New York 10017.

Dear Mr. Nolte:

A day seldom passes in East Africa when one cannot pick up the daily paper and read where some foreign power is contributing money, technical assistance or equipment to a "developing" country. Such gifts, although needed and sought after by most of the nations of East Africa, never-the-less cause unending and heated debates among the members of parliament as well as the general public. The dilemma arises when deciding whether or not to accept aid and also when confronted with the questions from whom, how long and how much. The situation becomes even more complicated when one uses Tanzania as an example of a "developing" country since the goal of the nation is <u>self-reliance</u>. This newsletter is about one particular aid program which has been in existence since 1969, the Lushoto Integrated Rural Development Project (LIDEP). In many ways it is characteristic of the cycle of all aid schemes.



RURAL LUSHOTO

GJ-20

The site for this project, Lushoto, is a mountainous locale in north-east Tanzania approximately 343 miles from Dar es Salaam. Its land area covers 3,497 square kilometers. The coolness of the year-round temperatures and the very picturesque terrain have made Lushoto for many years a choice migratory spot for European missionaries. Even today the site has a sizeable expatriate population. The area has been rightly nicknamed, "The Switzerland of Africa." I must confess that my safari to this part of Tanzania was a refreshing respite from the sweltering heat of Dar es Salaam.

LIDEP's present program is the product of a medically oriented German AID project. It's objectives were formulated from an indepth nutritional survey started in 1964 by a physicianbiochemist, Dr. J. Kreysler. According to the officials of LIDEP, Dr. Kreysler's primary purpose was to "assess the nutritional status of communities in Lushoto District as baseline studies to determine the effects of measures to improve nutrition and health at a later stage."

The original LIDEP program (October, 1969) based upon the nutritional survey was a very comprehensive and, reputedly, unique effort. The plan to integrate a series of political, economic and social activities into one massive program was met with much enthusiasm on the part of the Tanzanians. This approach fitted in well with the guidelines of the Arusha Declaration (GJ-4). The planning group described integration as meaning, "no part of the whole can function without others." Coordination, which most people felt to be the key phenomenon of the project, was considered as only a part of integrate included: 1.) Under Fives Clinic, 2.) Rehabilitation Centers, 3.) Nutritional Research Laboratory, 4.) Women's Workshop, 5.) Garage, 6.) Metal Workshop, 7.) Carpentry Shop, 8.) Building Masonry Training and Brick Making, 9.) Farmers' Training, 10.) Agricultural Extension, 11.) Vegetable Marketing, 12.) Water-Development, and 13.) Village Welfare.

As is often the case with many new programs, LIDEP had its conflicts, successes, failures and omissions which have resulted in several re-evaluations and subsequent expansion and deletion of specific activities, i.e., the following year after its beginning in 1969 recommendations were made to broaden and intensify the agriculture extension services along with an enlargement of the agriculture products marketing facilities. It was also necessary for LIDEP to establish more medical facilities for the Under Fives Children's Clinic. Finally, the planning committee, after much consideration, added a vocational training program to the rural training centers.

My direct contact with the Lushoto Project was somewhat limited. It consisted mainly of visits to an Under Fives Clinic in the rural town of Vuga some fourteen miles from Lushoto (the roughest 14 miles I have ever travelled) and a trip to two Nutritional Education Centers--one in Soni, five miles south of Lushoto and the other in Mlola, a two hour mountainous journey by land-rover.

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The Under Fives Clinic is similar in operation to the Well-Baby Clinics in the United States. The clinic is chiefly a preventive medical measure geared for children five years old and under. Its goal is to reduce the infant mortality rate which in the past has been exceedingly high. The Nutritional Educational Center on the other hand, while also offering medical services, is mainly interested in handling children with nutritional problems. The most significant of the nutritional anomalies at present are kwashiorkor and marasmus. Kwashiokor, simply described, is an illness associated with a protein deficiency in the human body. One may be getting enough food to eat, but usually the food is without protein content. Marasmus on the other hand is a condition caused by a lack of food. Food intake is just not enough to meet the daily requirements of the body. Children suffering from marasmus are generally known to have distended stomachs, pallored skin, a sparsity of hair and are often apathetic in temperament. The treatment the Center offers is a controlled feeding program.

As we arrived at the Under Fives Clinic in Vuga, over 100 mothers had already begun lining up in front of the clinic door. At first glance it appeared as if many of the women had left their youngsters behind, but upon looking closer one could see the little ones snugly strapped to the backs of their mothers under brightly colored kitenge cloths. I am always amazed by the orderliness which usually accompanies the long waiting period. Mothers seem to be most content to just sit and chat while their youngsters crawl around, nurse occasionally or just snooze while enjoying the warmth of the adult body.

By the end of the day, the clinic had seen over two hundred mothers with their infants. I was told that it was just an average day. It was the consensus of the clinic group that their present staff was just not geared to handle the present patient load while at the same time offering the client the indepth care which many of them need. These remarks were directed to the educational section of the program as well as to the medical portion. The staff felt that their attempts to educate the mothers enmasse were as unproductive as the cursory medical examination. They reported that the mothers were just not responding to their attempts to inform them on child care, health practices and nutrition. Their conclusions relative to their ineffectiveness were based upon the repetitious problems brought to the clinic at each visit. "Seeing conditions over and over which could have been eradicated a long time ago, that is, if we had been working with smaller groups, gets to be a little depressing," reported one of the workers. Many of the clinic personnel will bring this point up for discussion at their next planning meeting.

One could not be but impressed with the dedication and enthusiasm shown by the majority of the staff. I particularly enjoyed several of the "mass" educational lectures given by a Senior Rural Medical Aid. Her topic of family planning, which she had prepared for the women who ordinarily visited the clinic, became so lively that 10 men working in the area wandered into their open air session to find out what was going on. In a short time they too began to participate. One of the elders, contain-



Under Fives Clinic Demonstration





The technique of securing the baby

ing himself as long as he could, finally lashed out at the group of women with a warning that they should take these sessions more seriously. He went on to give support to the health worker who was emphasizing the need for family spacing. "We old timers," he said, "used to wait at least two or three years--you young people now days are bringing children every year." At this point the tension in the group broke and all the women doubled over with laughter. As the noise subsided somewhat the elder continued to make accusations, but this time began waving his walking stick in the direction of another small contingent of young men who had gathered. Sensing an oncoming attack, the men quickly turned and marched out of the compound. This too brought more chuckles from the women.

In addition to the family education program, the mothers are from time to time offered classes in : elementary first aid, hygiene, pregnancy, child birth, diseases (small pox, chicken pox, measles and whooping cough) and food preparation.

In several regions, it is taking the relatively young clinical staff a considerable long time to become established in the community. Many of the mothers who come to the clinic are much older than the majority of the staff and feel that their experience in cooking and child rearing far surpasses that of the staff. The local women at first resented being told that there might be better methods than those with which they are presently familiar. Having gained more understanding of human behavior over the past year however, and having made an effort to be more diplomatic in their approach to disseminating information, the staff is now enjoying a greater rapport with community members. Several of the staff reported that this new approach has certainly made their work easier and more effective. "At first", remarked one of the female staff, "many of the mothers were showing up simply to get the free food stuffs that we were offering. As soon as they would get their share, they would leave. Many are now staying for the full program."

Parents are encouraged to bring their children to the clinic for a complete physical and a series of weighings. The families of those children who are found to be underweight are given a supply of oats and skimmed milk. Mothers are then advised to bring their tots back to the next clinic for a followup examination. In addition to the examination the children are vaccinated against diptheria, pertussis and tetanus.

Transportation has been one of the impediments for the clinic--mothers have had to travel miles by foot to get treatment. The situation worsens during the rainy season. Problems also arise when a neighbor is not available to look after the remainder of the family as the mother travels to the clinic. During these occasions clinic is usually not attended. In the past mothers also reacted quite negatively to being charged fifty cents (7ϕ) per visit. Many parents felt that the charge placed an added burden upon their already meagre financial status and as a result, stayed away from the clinic. After much protest however, the fee was reduced to twenty cents.

While enroute to visit the Vuga program my host, Dr. R. Korte, Medical Director for LIDEP, related one other major problem which he felt that group is still attempting to clear. Rumours were spread throughout the district that the clinic team was no more than "wamiani" (blood suckers) using the young people as victims for their savagery. "It was quite a while before we realized that the people were reacting to the drawing of blood by our laboratory technicians" said Dr. Korte. "Compounding the reaction to the blood analysis process" he continued, "was the wide-spread talk of the death of a youngster whom the clinic had recently examined. The combination of these two situations caused a lot of people to shun the clinic and for many to verbally attack the whole LIDEP effort." Dr. Korte said that although the clinic is making progress it will be only when more locals are trained and recruited into the program that the full confidence of the people will be gained. At the present time the clinic staf-fing pattern consists of: 1.) Senior Rural Medical Aid, 2.) Rural Dispensary Assistant, 3.) Cleaner, 4.) Sweeper, 5.) Village Midwife, and 6.) Nursing Assistant.

The Nutritional Education Center staff did not meet with as much resistance as the Under Fives Clinic personnel. The programs of the Nutritional Education Centers, more widely known as Rehabilitation Centers, filled an immediate need and even now continue to be the most popular of the LIDEP project. I spent the majority of my time visiting with the personnel of the two nutritional centers located at Soni and Mlola.

Patients are referred to the Nutritional Centers by any one of the dispensaries (30) or Under Fives Clinics located around the Lushoto District. The centers' primary mission is to treat malnutrition cases. The people who are referred to the centers present problems which are usually beyond the capability of the local health facility to handle. The nutritional centers normally func-tion on an inpatient basis, but from time to time make allowances for patients who live within commuting distance and whose presence at the center, around the clock, would cause undue harship at home. During the beginnings of the centers, the program was structured on an outpatient basis. However, it was soon learned that the amount of time which was needed to break the habitual cycles of malnutrition and to instill better methods of coping with the whole area of family health and nutrition required 24 hour attention. The need for this intensive program was further augmented by the time required to treat the accompanying medical problems associated with kwashiorkor and marasmus. Most often they are too complicated to be handled on an outpatient basis. Both centers at the present time can comfortably accomodate eight mothers with their children.

As with the Under Fives Clinic, each child who comes to the Nutritional Education Center is given a complete physical examination with heavy emphasis on the stool analysis. Many children who suffer with a nutritional problem have been found to have a heavy accumulation of intestinal worms which block the digestive cycle. Other special examinations include hemoglobin and T.B. (Holt) tests. Positive T.B. cases are sent to a central hospital



- Abv: Village Elder & Male onlookers Rgt: Nutritional Center kitchen facility
- Blw: Bedroom view Dorm & Toileting Buildings









where the suspected tubercular patient is given an x-ray and another complete physical. Youngsters found to be negative are given a BCG shot, innoculating them against tuberculosis.

Patients who are admitted to the Nutritional Center are kept under twenty-four hour surveillance for the first week. Infections which usually accompany the malnutrition syndrome are given immediate treatment by the medical staff. Complicated diseases are referred to the regional hospital at Lushoto.

The time period for the treatment of kwashiorkor and marasmus vary, but generally the major symptoms are eradicated between four and six weeks. Marasmus owing to its debilitative tendency takes a longer time to cure than does kwashiorkor. The victims of marasmus also face the possibility of a rapid spread of infection resulting in death unless it is watched closely.

My trip to the Mlola Nutritional Center turned out to be a most memorable occasion. A two hour drive over several mountain passes with spectacular views followed by a very warm and unpretentious reception by the staff of the Center were preludes to a very busy day. The facility is centrally located in a circular range of mountains. I was so carried away with the scenery, I spent the first few minutes of my visit just taking in the landscape which seemed to have eluded the staff. Many threw puzzling glances my way as I spent time photographing the breath-taking view.

The four buildings at Mlola which were constructed through a self-help scheme, house the basic program of the Center. One of the buildings consisting of three adjacent cubicles serves as a dormitory for the women and their children. Although parts of the building were under construction during my visit, the sleeping areas were nicely furnished and arranged. There was however, a minimum of living space for the twelve mothers living there. The dormitory which was officially opened in May, was constructed to hold only nine mothers with their tots.

The day for the staff and clients starts at 7 a.m. at which time the morning meal is prepared and the youngsters are given baths. Each activity such as these are used for a teaching and practice session. On this particular occasion mothers are taught the correct proceedure for bathing while at the same time made aware of what to look for pending potential medical problems.

The kitchen, which is one of the main activity centers, occupies another complex. Its design follows fairly closely the basic layout of those found in local homes. In order to accomodate the large number of women however, it was necessary to provide more equipment and space than one would normally find in the average home. The decision to duplicate the conditions in the home in order to demonstrate the range of possibilities with existing resources underwent much discussion before it was finally approved. Several planners felt that they should take this opportunity to introduce new models to which the residents might aspire rather than maintain the status quo. Everyone agreed this approach to be ideal, but in light of the envisioned problems associated with the introduction of new food products and different ways of preparing these foods, realistically the latter was all the change people could manage at this stage of their development.

Following breakfast, the babies are given a routine examination by the chief nurse: temperature, pulse, eyes, nose and throat. They are then weighed and readied for their morning nap. Throughout the day, mothers are given opportunity to relax and enjoy a number of handicrafts such as sewing and knitting. Formal activities for the day are concluded by 8:30 p.m. From this time until 9:30 p.m., when they retire for the evening, the women simply sit around kerosene lanterns and relate their activities of the day or tell about their families at home.

The planning group did manage however, to experiment with one of the structures. While the kitchen and sleeping areas were built to local specifications, toileting facilities were "modernized". The builders installed showers and flush commodes, as opposed to the pit latrines usually found in village homes. The staff indicated that thus far the programs have been relatively successful. The women are beginning to accept and learn new cooking methods while at the same time becoming more aware of the nutrient needs of the human body. It appears as if the area of menu planning is emerging as the key factor in food preparation. Here-to-fore the women looked upon each meal as a "fait accompli".

The fourth building complex contains staff housing. It is occupied by senior staff members and medical assistant trainees.

Both Nutritional Education Centers posses a demonstration shamba (farm). The one at Mlola however, is by far the more successful of the two ventures. Many local plants which had been found difficult to raise along with many new crops were thriving well under the meticulous care of the staff and clients. Mrs. Guga, the nurse in chage of the Mlola project, spent a considerable amount of time taking me through the shamba and showing me almost every inch of soil and every plant. From time to time she would pull a leaf or pluck a vegetable and request me to taste them. Smiling, she indicated that this is not done simply for visitors, but that she encourages mothers, who work in the shamba on a daily basis, to feed some of the raw vegetables to their children as snacks. It is obvious that the success of the Mlola shamba can be directly correlated to the skills and enthusiasm of Mrs Guga alone.

At the end of their treatment period, according to Mrs Guga, each mother is given a starter supply of all the plants found in the demonstration shamba. "Just to give them the technical skills" she reported, "was not enough. When the mothers left our program, they could not finance the variety of crops which we introduced during their stay." The following crops were found in the shamba: hybrid maize, peas, onions, chick peas, bambara nuts, sweet pot-



Mrs Guga



Nurse in charge at Soni



Morning activity



The important meal-time

atoes, pawpaw, bananas, carrots and sun-flowers. When my eyebrows raised at the mention of sun-flowers, Mrs Guga quickly gave me a rundown on the nutrient value of the seeds. I was also told that this plant is very easy to grow in the region.

Most of the mothers whom I met during my visit seemed to have made good adjustments to the demands of the program. The staff reports that the early weeks were the toughest. Many of the mothers thought they were coming for a respite or holiday. Little did they know that the schedule would be filled from sunup to sunset with educational and medical activities. Also, each mother in addition to taking care of her own child is assigned to different work areas. The range of responsibility includes such chores as kitchen preparation, shopping, and general cleaning.

At first, many of the mothers also find it difficult being away from home for longer than two weeks, but once they realize that the skills which they are acquiring will also benefit other members of the family they tend to stick it out. Women who go through the program find out that they also become assets to their respective communities as they return with new and practical information.

As I reflect on the Lushoto Project, thoughts of the Tufts-Delta project (GJ-1) in Mound Bayou, Mississippi come to mind. As I analyze the success of these two endeavors, it becomes clear to me that it does not rest solely with the new concepts, the new programs or even to the "specialists" who are brought in to supervise. The success, I feel, is reflected in the level of involve-ment of key members of the local community. The majority of the people in rural areas seem to hold fast to the "old ways" and view most innovations with disdain. It is usually by virtue of the support given by respected and influential locals that progress becomes possible. This point was brought to my attention by one of the health workers in Mlola as he lamented upon his early failure in the community. His initial attempts to introduce new methods of health practice to the residents failed consistently he At first he thought it was due to his technique, but after said. six months he realized that his youth and his transitory status were major factors deterring his credibility. He added that it was only when he could accept a secondary role in the community and use key members as the prime movers that his program began to move forward.

There has been no formal evaluation of the new Lushoto project as yet, but from the many comments of staff, clients and community people and from the progress according to the rough statistical picture shown to me, the program has indeed accomplished its expectations. The major question which remains to be answered however, is whether or not the Tanzanian Government will be willing or more realistically, can afford to continue the program after its scheduled end in September 1973. Although this million dollar program fulfills a very valuable need in the community as well as offers employment to many citizens (280), whether or not it will rate high enough on the priority of the government will depend upon other commitments. The question as to which of the hundreds of aid programs, including Lushoto, the government should assume financial and management responsibility for is not one which I would like to tackle. As one of the Vice-Presidents put it in a recent speech to the All-African Womens Conference, "it will be a great day when Tanzania will not have need for outside assistance, but will be able to offer its citzenry the best possible life-style utilizing its own resources."

Sincerely George Jones

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