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COMMUNITY INVOLVEMENT IN HEALTH CARE IN GHANA: AN
EVALUATION OF BRONG AHAFO RURAL INTEGRATED
DEVELOPMENT PROGRAMME - BARIDED (1974-81)

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V I T A

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ABBREVIATIONS USED IN THE TEXT

1. BARIDEP (or Baridep) - Brong Ahafo Rural Integrated Development Programme.
2. VDC - Village Development Committee
3. TDC - Town Development Committee
4. CCA - Community Clinic Attendant
5. CC - Community Clinic
6. CF - Community Farm
7. TBA - Traditional Birth Attendant
8. PHNO - Principal Health Nursing Officer
9. HFHT - Holy Family Hospital Techiman
10. HC - Health Centre
11. HP - Health Post
- HF - Holy Family

PH Dept. - Public Health Department

*For especially Project Design sheet - Logical Framework.

1

CHAPTER I

I N T R O D U C T I O N

Since the Danfo Project - (a Joint Community Health and Family Planning Project, initiated by the University of Ghana Medical School and University of California, Los Angeles), community involvement and participation in the delivery of health care service and health programming has been recognized in Ghana to be an important factor in maintaining health systems and in sustaining community development. But what part community members should play and how they can be motivated and committed to initiate community health programmes have not been subjected to critical and empirical analysis. Recognizing the important role community members can play in health systems, the Ministry of Health in collaboration with the World Health Organization - WHO, initiated a 5-year health project in the (former) Wenchi District in Brong Ahafo region of Ghana, called THE BRONG AHAFO RURAL INTEGRATED DEVELOPMENT PROGRAMME, hereafter coded BARIDEP, or Baridep for short.

The BARIDEP is a programme for studying and obtaining experience in "how activities for improvement of health can be integrated into the general development process based on the community development approach with the active involvement of local communities."¹ Moreover, it is a programme for evaluating the effects of such integration. The programme has two components viz. the Implementation component and the Research/Evaluating component. Responsibility for the former component rests solely with the Government of Ghana primarily through the Ministry of Health, whilst the Evaluating aspect is the joint responsibility of Ghana Government and the World Health Organization - WHO, with some assistance from the Swedish

¹BARIDEP - A Review of 3 years Experience, April, 1978, p.3.

International Development Agency - SIDA.

1.1. Background Of The Baridep

The BARIDEP's initiation was due to the expressed will and collaboration between Ghana government and the W.H.O. The W.H.O. was working among other things: to establishing a relationship with a (particular) programme which would permit it to monitor and evaluate the development of a community involvement programme. The organization had the expressed goal of gaining experience and developing methods which would have potential application in other country situations. Coincidentally the erstwhile National Redemption Council (which later assumed the name of SMC I and II) had (or was having) an expressed policy of self-reliance in economic and general developmental terms. The government had formulated and endorsed a policy of administrative decentralization, placing greater emphasis on the development and use of resources at both the community level and the peripheral level of government services.

The first direct discussions between WHO and the Ghanaian authorities concerning the programme was in April-May 1973. Later there were several visits to Ghana by the WHO staff. The purpose of these visits was to hold discussions and to work out the objectives (the Project Design) and structure of the project and also to propose plans for implementing and evaluating (Logical Framework, See Appendix) the BARIDEP. However, the programme could not take off till 1975.

February 1975 marked the actual start of the BARIDEP though it was officially launched on the 22nd April, 1975 at Kintampo. It was there that the District Medical Officer of Health in the then Wenchi District (now broken into Wenchi Techiman and Nkoranza Districts), was designated by the Ministry of Health to be the Project Field Director. The same month also marked the arrival of Dr. J.A. deVries, selected to be the W.H.O. staff member, responsible for co-ordination of research activities. Recruitment

for other evaluation staff positions had already started, but it was not until mid-1975 that a reasonably full complement of national staff for these positions were recruited.

The development of implementation activities of the Baridep has two phases. The first phase starting in February 1975 and lasting to September of that year, may be described as focusing on orientation to the community. Involvement Approach, planning and setting the stage for co-ordination of implementation activities at the national, regional and district levels.

During the planning of the programme, the Community Involvement Approach (to be discussed in detail later in the text) was discussed with the representatives of the several ministries thought to be most likely to be involved in the implementation of the programme. Their suggestions and proposals were incorporated into the general framework in the plan of operation (Project Design). Provision was made for a National Co-ordinating Committee to co-ordinate all the activities and programmes of the respective ministries as they relate to the aims and objectives of the programme and to ensure the provision of necessary resources. Similar co-ordinating mechanisms were planned at the regional and district levels. The Ministry of Health was designated to serve as the secretariat for these various co-ordinating committee which meant the preparation of the agenda and the various background documents for each meeting.

The second phase starting in September 1975, introduced the necessary training or re-orientation of government staff, intensified contacts with communities in the district, and led to the specific identification and development of various appropriate community self-help project.

One important early element in the orientation and planning stage was an 'Area Profile Survey,' carried out in the first instance in the Nkoranza Local Council area of the district. There are three District Council areas in the Programme's area - Wenchi, Techiman and Nkoranza

(See Chapter 2); and it was decided to start the programme's activities in the Nkoranza area and then move to the other two council areas in turn.

The Area Profile Survey was designed to provide the programmes's planners with basic information about the geographical location and accessibility of all the villages and settlements in the area, their ethnic composition, population, number of households, leadership and local organization, local conditions and facilities, experiences with community development projects and community needs expressed by members of the communities. More specific questions relevant to the various ministries involved were also included in the survey. The survey was carried out by members of the National Malarial Team who were more experienced in mapping and reconnaissance work.

Although no formal plan was developed at this stage, there were several main themes which were to establish the context for co-ordination and implementation. These included the orientation of field staff of the various ministries to the co-ordinated approach to be taken by the programme and to the goals of working actively with the communities to enable them to carry out their own self-help projects. Intensified contacts were also made with the communities in the area to explain the programme's aims with emphasis on community involvement (with some government assistance) in solving their own problems.

Other channels of communication with the communities in the area were utilized to promote an understanding of the approach being taken by the government. An inaugural ceremony featuring the customary libation, drumming and dancing and speech-making by local chiefs, the Regional Commissioner, the Director of Medical Services and the Assistant Director of WHO, was well attended in April, 1975. This served to introduce the project in the appropriate way to the local chiefs and their people and also provided an opportunity to challenge the community as well as government staff to tackle their problems together.

During July, 1975 discussions held between Baridep's field staff and UNICEF representatives during which the commitment of UNICEF to the programme was confirmed and UNICEF inputs discussed. These inputs included: motor-bicycles, a four-wheeled vehicle (Land Rover) for co-ordinated field visits, midwifery kits and other materials for training health workers, initial "buffer-stock" of construction materials for village projects, to be replenished through a rotating fund, and other resources which were beyond the scope of what could be expected from the communities themselves.

Finally, several additional efforts to orient departmental staff to the approach taken in the programme area were also taken. These included short one day seminars and on-the-job exposure. A six week course was also run by the staff of the University of Cape Coast and the Department of Social Welfare and Community Development. Moreover a mobile cinema van of the Department of Social Welfare and Community Development toured to show educational films to inform the villagers about various development projects and portraying means by which they could become involved in improving their own conditions. These films were followed by discussion sessions with the village leaders. Later the Ministry of Information was invited in early 1976 to develop audio-visual aids for the programme. A series of slides photographed in the area showing community members engaged in various stages of deciding upon and carrying out local self-help development projects were prepared. These slides were for use by community development workers in their educational/motivational approach to communities. Films, cameras and projectors have been made available to the programme by UNICEF. This in a gist is how Baridep developed. Other details appear in the text.

1.2. FACTORS RESPONSIBLE FOR THE INITIATION OF THE BARIDEP

Ghana has made several efforts to extend basic health services to rural areas to correct rural-urban imbalances in health care. Auxiliary health personnel have been (and are being) trained for staffing rural health institutions so as to promote health care efforts. For example (even) the famous

7-year Development Plan of Dr. Kwame Nkrumah which aimed at economic and social reconstruction of the country had this aim for health:

in the plan period government intends to accord the health of the people a high order of priority....It is the ultimate intention to aim at the highest standards of health service and health care obtaining anywhere in the world. Immediately however, the maximum possible allocation of £G31 million has been made available for the extension of medical services under this seven year plan. Government will ensure that by the exercise of the greatest care in planning and construction of health facilities these aims would be achieved.²

Thus health planning has mostly concentrated on brick and mortar and the training of staff whose numbers are woefully inadequate and whose orientation is towards the urban few (with the neglect of the rural masses).

As in other developing countries, the provision of the health services as shown in the extract from the 7-year plan above has been almost futile. The basic reason is that health services planning has been doing the 'wrong' things because of misplaced priorities. Consequently, the existing health service system in Ghana, funnels resources towards the minority of population mostly city-dwellers who have access to hospital-based services which cater for specialized health problems.

As argued by Sai,³ with supporting facts and figures, communicable diseases are the prevalent diseases in rural Ghana. Together with poor environmental sanitation, malnutrition, maternal and child health problems, death rates especially of infants are very high. The rate at which people fall sick is also very high. Other factors which together with the above making it imperative to provide cheap, efficient and broad-based health care system to cater for the rural areas are found in Appendix I.

Summarising information in Appendix I, the following points are notable: It is clear that curative medicine takes 75.9% of allocated health resources,

²Ghana Seven-Year Development Plan 1963-1970, p.19.

³Sai, F.T. Planning for Health Needs of People. Ghana Medical Journal Vol. 4 1965, p.108-112.

whereas only 9.7% of health budget is given to preventive care. The old system has also focused mainly on the construction of facilities rather than the provision of services. It has also concentrated on over-sophisticated training with emphasis on specialized hospital-based services for the few rather than the promotive and preventive services for everyone. The problems and constraints under which the present health care system operates means that an alternative and more broad-based system must be found and this is what BARIDEP seeks to do.

Health programmes (therefore) must reach the entire community in an area. They must solve the dual problems of overcoming distance and affecting changes in human behaviour, and in altering the physical environment. The constraints of non-availability of doctors and physical distances make it difficult to place doctors in all rural areas. Lower category of health workers must therefore provide health care for their communities. They must be trained to work with their people to improve their health care picture; and hence the initiation of the BARIDEP.

1.3. THEORETICAL FRAMEWORK/PHILOSOPHY BEHIND THE BARIDEP

The thinking behind the BARIDEP is that local communities should be motivated and involved in decision-making and must participate in health (and other) programmes so that ultimately they 'own' the programme in their respective communities. Health and other programmes should be planned at the grass-roots and developed to suit local conditions. Moreover, we must use local resources such as local buildings, manpower and agriculture to create health infrastructure. This is usually termed the Community Involvement Approach.

The (BARIDEP) model is also of the opinion that each community needs total health care and not fragmented care. Each area needs promotional, preventive and curative care i.e. comprehensive health care and services. Finally, in the BARIDEP, which is essentially a health model, the village

Development Committee - VDC, takes (or should take) the full responsibility to provide and maintain the new health structure (envisaged). It also bears the responsibility to finance the system. It is also expected of every community to engage in a viable co-operative or community farming enterprise or otherwise, with the hope that such endeavours would help sustain (financially) community health and other schemes.

1.4. AIMS OF THE BARIDEP

To tackle the already listed health care problems in the BARIDEP area, the programme (aims) aimed at the following (which were extracted from the programme's own records⁴):

1. Assisting the rural people to undertake projects which will enable them to provide some basic social amenities for themselves.
2. To assist in the provision of health and agricultural extension services to the rural farmers in order to increase their productivity and thereby raise their standard of living.
3. To obtain balanced distribution of primary health care and other amenities. In this bid the BARIDEP hopes to improve the rural populations health in order to increase their productivity.
4. To co-ordinate the development efforts of government departments and agencies at National, Regional and District levels of integrated Rural Development.
5. To encourage the rural community to undertake self-help projects which can provide social amenities such as water, health, schools etc. These projects are expected to be initiated by the rural communities with the help of BARIDEP.
6. The research aim of the project however is to obtain practical experience and technical knowledge that could be used in planning and implementing similar projects for health care delivery systems in other areas in Ghana as well as in other countries.

The main objective of this thesis is to find out whether the above aims were carried out and to what extent they have been achieved.

⁴Dr. P.A. Twumasi - The Role of Rural Health in Community Development: The Case of Kintampo Project (Unpublished Seminar at Commonwealth Hall, Legon) July, 17, 1976, p.2.

1.5. OBJECTIVES OF BARIDEP

Translating these aims into more specific terms, the objective of BARIDEP is:

1. to achieve improvements in health status of the people of Wenchi Techiman and Nkoranza Districts through the establishment of a system - community clinics and Traditional Birth Attendants, for providing health care and
2. to promote the social well-being of the people through self-help projects decided on, organized, performed, financed and evaluated by the community members themselves. It was envisaged that through such self-help projects the important preventive and promotive health care measures would be made available to and be accepted by the people in the programme area. The objective(s) is (are) for the implementation component of the programme.

During the same period, the objective for the evaluation component is

1. to measure the effectiveness and efficiency (and probably the appropriateness) of introducing and providing health care through the involvement of local communities and
2. to monitor the whole process of developing and implementing such approach.

To achieve the above-mentioned objectives, the BARIDEP planned to undertake the following activities:

1. that data will be compiled and analyzed from various sources and from the surveying of the programme area to gather basic social, economic, demographic, geographical and health data and information about community needs and priorities.
2. It was also planned to integrate and orient (national) staff to the philosophy, objectives, methods, specific contents and procedures of the project.

3. The programme also intended to train community health workers, community clinic attendants (CCAS), Traditional Birth Attendants (TBAs) and other auxiliaries at the local level, using facilities at the few health institutions available for demonstration purposes when necessary.

Technical advice would be sought from the appropriate staff seconded to the BARIDEP in order to communicate technical information and device procedures.

4. It had also been planned that during the programme period community involvement techniques e.g. visits, discussions, interviews, advising the communities on potential courses of actions available, community decision-making etc. would be adopted and used in order to determine community-felt needs, possible actions to be taken, and adoption and implementation of community self-help projects.
5. Finally, technical supervision would be given by government (Ministry of Health and other BARIDEP staff) personnel including continued training and assistance of community health workers.

It must be stated that it was decided at the very early stage (Project Design stage) of the BARIDEP that assessing the impact of the programme in terms of changes in health status was (is) not the primary) research goal of the evaluation component. Rather the focus was on various indicators of the establishment of primary health care. The main reason given was that impact assessments of health status have proven almost everywhere to be highly expensive operations requiring elaborate field staff. Moreover the adequate baseline data needed are hardly available in Ghana being a poor developing country. Accordingly the evaluation by this thesis does not compare the beginning of project status/situation in health with the End of Project status in the programme's area. The evaluation is thus based on what the programme set out to do (only).

1.6. THE PROBLEM

The BARIDEP as mentioned earlier has two components: the implementation and the evaluation components. Both components concern three basic projects.

(a) the motivation, initiation, organization and the establishment of community farms.

(b) the selection and training of community clinic attendants - CCAS and

(c) the selection and training of Traditional Birth Attendants - TBAs.

The plan of operation of the programme was carried out in the following manner. Community farms were established and when the idea was found after monitoring to have been accepted and was getting roots, villages/communities which have established farms were asked to nominate people for training to be community clinic attendants. Such villages were also asked to make all the preparations needed to set up community clinics under the guidelines laid down by the BARIDEP. After about 8 months training, the village/community clinics were opened after the clinic attendants have completed their training. At the same time traditional midwives were recruited for training to come and help in their communities.

The implementation component of the programme as would be seen later in the subsequent chapters has carried out all its functions to the maximum. But it is questionable whether the evaluation component has done the same. Indeed only substage or partial evaluations have been done for the various projects under the BARIDEP. The substage or partial evaluations were purposely for re-direction or plan implementation since no such programme has ever been carried out in the country to give guidance. Thus one could say that the programme has concentrated mainly on the implementation aspect which has been (was) completed (1980). The evaluation component has only monitored and carried out partial evaluations.

However, the BARIDEP's own records⁵ (on 1st March, 1980, the end of the programme) show that most of the community farms have been abandoned and that an unexpectedly 'large' number of community clinics were being run from only fees charged from patients, a situation contrary to what the BARIDEP has been aiming at.

This clearly shows that some problems with the programmes were not identified or cropped up when the programme was being implemented; and did not come to light because there was no full scale evaluation of all the (stages) projects of the programme. Really, there has been no attempt to evaluate or reappraise the whole BARIDEP, relating the achievements as well as the handicaps of one stage of the programme to the subsequent ones. The programme, aiming at integration was essentially sequential. Therefore the success of the community clinic and the Traditional Birth Attendants training projects were all dependent on the idea of community farming; similarly the success of the Traditional Birth Attendants was also dependent on the establishment of community clinics.

The assumption (probably) made by the BARIDEP was that once the idea of community farming was accepted and the farms were set up, the communities in the area would continue with it and hence it continued with the other projects. This may be true because the programmes implementation was on the Systems Model. The failure of most communities to continue with the community farming idea the close down of village/community clinics are all indications of the need for a full scale evaluation of the programme. Thus in short, the BARIDEP has not been fully evaluated; only some appraisals or partial evaluations have been made.

⁵BARIDEP - An Appraisal of 5 years Experience March 1, 1980.

The problem this study attempts to solve is therefore to evaluate the whole BARIDEP since each of the three projects did not function long enough before the subsequent one(s) were initiated. Time is ripe enough now for such an evaluation since the programme's life was from 1975 to 1980 and has ended. Moreover, two more years were added because the programme is being replicated on a national scale under the government's primary health care programme. The study also aims at relating the successes and failures in the preceding projects to the subsequent ones so as to suggest corrections or suitable alternatives to make the integration of health into the general development process of the area a success.

1.7. SIGNIFICANCE OF THE STUDY

There are numerous audience for which such an evaluation might be relevant or of particular interest. In the first instance the evaluation (is) may be of crucial importance to those personnel - (both of government of Ghana and the WHO) most closely associated with the BARIDEP. For them it (is) may be an opportunity to carefully examine the programme in the light of the objectives set, to jointly reflect on the nature of accomplishments and problems, and to evolve (probably) better directions for the current extension of the programme in the form of the Primary Health Care Programme (PHC) which they are involved.

It must be stressed again that the sub-stage (partial) evaluations carried out by the implementation component of the BARIDEP were purposely for direction or to get the 'go ahead signal' during the implementation stage'. This study is another way of 'monitoring' and recording coherently or sequentially and in a co-ordinated way, the BARIDEP's activities from the beginning to the end. Thus it is directed at all and sundry who are or might be interested in the experiences, achievements and failures of

the programme. As a planning student, the research would provide the author who takes much interest in health planning with some experience.

1.8. SCOPE

A study like this involves an extensive collection and detailed analysis of data. The cost is thus high in terms of time, finance and other resources. As a result the study dwells on the BARIDEP's activities in the Techiman District. The reason for this choice is simple. The BARIDEP started in the Nkoranza District but the modus operandi was fully worked out when tackling the Techiman District. The Wenchi District was the last to be reached but BARIDEP's activities are limited to its periphery with the Techiman District.

The study begins by describing briefly the whole BARIDEP area and later the Techiman District (the study area) to furnish the reader with information on the environment in which the programme operated so as to enable any recommendations on future replication be made. This information would also enable the reader to assess why the programmed failed or succeeded and also to carefully assess this work/study. Items that are discussed include the location, size, climate, the population, occupation, health facilities, standard of living and etc.

The initiation, organization and operation of (1) Community Farms (2) Community clinics (3) the training of community clinic attendants (-CCAS) as well as Traditional Birth Attendants (TBAs) their successes and problems are also discussed. However, the development of a training centre at Kintampo (BARIDEP headquarters) to improve peoples skills, the school health activities, the village nutritional activities, and the publication of a newspaper - 'DAWURO' - the gong-gong, have been left out. This is because they were only tried for a few months in the Nkoranza District only

when the BARIDEP has just been inaugurated. A discussion on Health Education Committees is also left out because no such committees have been formally formed in any of the districts covered by the BARIDEP.

1.9. LITERATURE REVIEW AND METHODOLOGY

Different writers on Evaluation give varying definitions; but it is more important to understand the different approaches to evaluation than attempt a universal definition. Two tentative approaches to evaluation can be identified through the main types themselves are based on a necessarily arbitrary division of an imagined hard-soft continuum.⁶

Hard-line approaches are those which assume an exact definition of evaluation and a set of specific procedures to be used, these being procedures and techniques of rational and objective kind. Soft-line approaches are characterized by a general or vague definition of evaluation with few specific procedures. They are mainly subjective and allow for opinion. Moreover soft line approaches allow for the partial or eclectic application of various techniques.

There are two types of hard-line evaluative approaches viz. Goal Models and Systems Models. The basis of the systems model is that although a programme tries to achieve goals of its own, its implementation occurs in a wider social context which both receives and influences the programme. Evaluation by this approach is the act of finding out how a programme comes to interest with relevant existing systems to produce new systems, rather than simply establishing outputs which of its planned goals have been achieved. Evaluation itself becomes a sub-system of the organization, feeding back information on the implementation of each stage of each element of the programme. (Thus clearly, this was the system used when running the BARIDEP). This system is therefore useful in improving the

⁶Cox FM Erlich : Strategies or Community Organization p. 159.

planning and implementation of programmes. But it is very weak in giving an overall judgement about the usefulness of one total programme strategy relative to another.

It must be stated that the BARIDEP sub-evaluations were purely on the Systems Model. This system gives the following advantages:

1. Factors such as capacity to change, ability to recruit resources and maintenance of organizational structure are in systems terms, important as pre-requisites for the organization to produce outcomes that reflect its objectives. Therefore it is valuable to investigate efforts going into organizational maintenance and development and their effectiveness, as part of the attempt at evaluation. It gives a way of rooting a particular programme in the reality of its organizational context.
2. The systems model of evaluation also enables the growth of an organization to be identified as something more or less effective in its own right, over and above what it contributes to the achievement of particular goals.
3. The evaluative approach of the system model is fairly straightforward once organisational subsystems have been identified, since relatively narrow aims/goals can then be set for each and these can be evaluated in goal-model terms.
4. Finally, the systems model liberates the evaluator from the domination by objectives. For failure to achieve planned goals may actually mean success in another part of the system, and by contrast the strict achievement of goals may turn out to have been damaging in the social context surrounding the programme.

However the Systems Model has the following disadvantages which does not or make its application very difficult and costly in terms of time and resources:

1. For the model to be successful, the evaluator must conceptualize the whole programme and its environs adequately in terms of abstract systems and then relate actual circumstances to these abstractions in order to produce the evaluation itself.
2. It lacks the many advantages of the Goal Model.

This thesis unlike BARIDEP's own evaluation adopts the Goal-Model approach to evaluation. The essence of the Goal model for evaluation is that a programme of action has been planned or carried out (e.g. the BARIDEP) and this is assessed (evaluated) in strict relation to stated general aims and to the objectives that are (were) specified. In so far as the aims (BARIDEP's) are (were) well stated, objectives can be turned readily into statements of behaviour that should occur if those objectives have been (are) achieved. This behaviour is then taken as a sign by the evaluator that there has been some progress toward the achievement of the aims. The advantages of the Goal-Model and hence its acceptance and use by this study are many; the key ones are:

1. Ideally the Goal model describes whether or not the effects of a programme on people and institutions have been what was intended. Such accounts are useful to the planners/organizers of social programmes if those programmes have clearly defined aims.
2. The model is also very relevant when social programmes that have been set up specifically as experiments (and the BARIDEP is such an example) and which are to be replicated later in similar environments, are to be evaluated. In such cases, the programme has been based initially on hypothesis/assumptions that certain actions will produce certain outcomes/behaviours. The evaluator uses his findings to test these hypotheses.

The BARIDEP clearly have specific aims and objectives. The programme also relies on a basic assumption that "health affects socio-economic factors and is itself affected by socio-economic factors notably income and level of living."⁷ The programme was thus designed and implemented on assumptions based on the major one stated above. It is also purely experimental. Thus it is imperative that the Goal Model and NOT the System Model (adopted by BARIDEP's evaluators) be used in the Evaluation.

1.10. CRITERION FOR EVALUATION

Specifically, this study uses the Tripodi's⁸ approach to evaluation under the Goal Model. According to Tripodi, social programmes (like the BARIDEP) although differing in terms of the nature, goals, duration etc. have/or must solve the following similar developmental problems:

1. The staff must get enough human and material/physical resources to initiate the programme.
2. They must make contact with the clientele.
3. They must supply effective service to their clientele.

These problems give rise to three stages of social programmes, sequential in theory but in reality often over-lapping. These are:

- (a) Programme initiation - getting staff, identifying needs, identifying target clients, planning the programme and setting of objectives.
- (b) Programme contact - finding a way to contact potential clients and exclude appropriate ones.

⁷ Twumasi P.A., - The Role Of Rural Health in Community Development; The Case of the Kintampo Project (unpublished) Legon, Accra, July, 1976 p.2.

⁸ Tripodi Fellin and Others: Social Programme Evaluation, Itasca, Illinois FE Peacock Publishers, 1971.

(c) Programme implementation - providing the main services etc.
training of people.

Each stage, ideally needs to be recognised and evaluated for what it is. The BARIDEP has all the three stages and evaluation has been done in the text.

Tripoli et al also recommend the following procedure or processes which are sequential:

1. Recognizing both the long-range and operational goals for the whole programme.
2. Identifying the current stage of programme development (BARIDEP is completed and therefore data was collected for this process).
3. Formulating 'appropriate' evaluative objectives (The objectives of the projects under the BARIDEP are all well documented). The programme's headquarters was contacted and all necessary data extracted/culled. Thus any objectives stated in the text are BARIDEP'S (the designers) own objectives.
4. Selecting and applying relevant techniques of evaluation.
(The Cost-Benefit methods of evaluation may be out of place since the programme was not designed to measure impact or do impact assessment and also the element of costs is not so essential here. The Social Research techniques - surveys, interviewing participant etc., were used).

The mechanism of logical framework, designed and used by USAID⁹ for evaluating social programmes has been adopted and used by the study. The design and operation of a Logical Frame is found in the Appendix. A Logical Framework has been worked out for each of the projects and data has been collected to test/evaluate what each project was designed to achieve as shown

⁹USAID

in each Logical Framework/project design. Compensations are made with the data collected and analysed and the targets (1) Project outputs (2) the Objectively Verifiable Conditions (3) the Magnitude of Outputs and (4) the Assumptions made when designing each project. The assumptions are only tangible when the project purpose is achieved, in which case they are very likely to hold true if replicated. It must be noted that the designers of the BARIDEP did not use the Logical Framework. It has been applied by the author to analyse each project efficiently and effectively. All the information in each Logical Framework was extracted or culled from the BARIDEP'S records. But most of the tables in the text were compiled from the author's study. The specific procedure(s) of data collection/methodology mentioned in each chapter.

The next chapter describes the locality, giving information on the economic and social structures - or for short the environment in which the BARIDEP was initiated into. The environment is typical of a rural area in Ghana and for that matter the 3rd world. It is highlighted to give information to readers and other people who may want to replicate this study elsewhere.

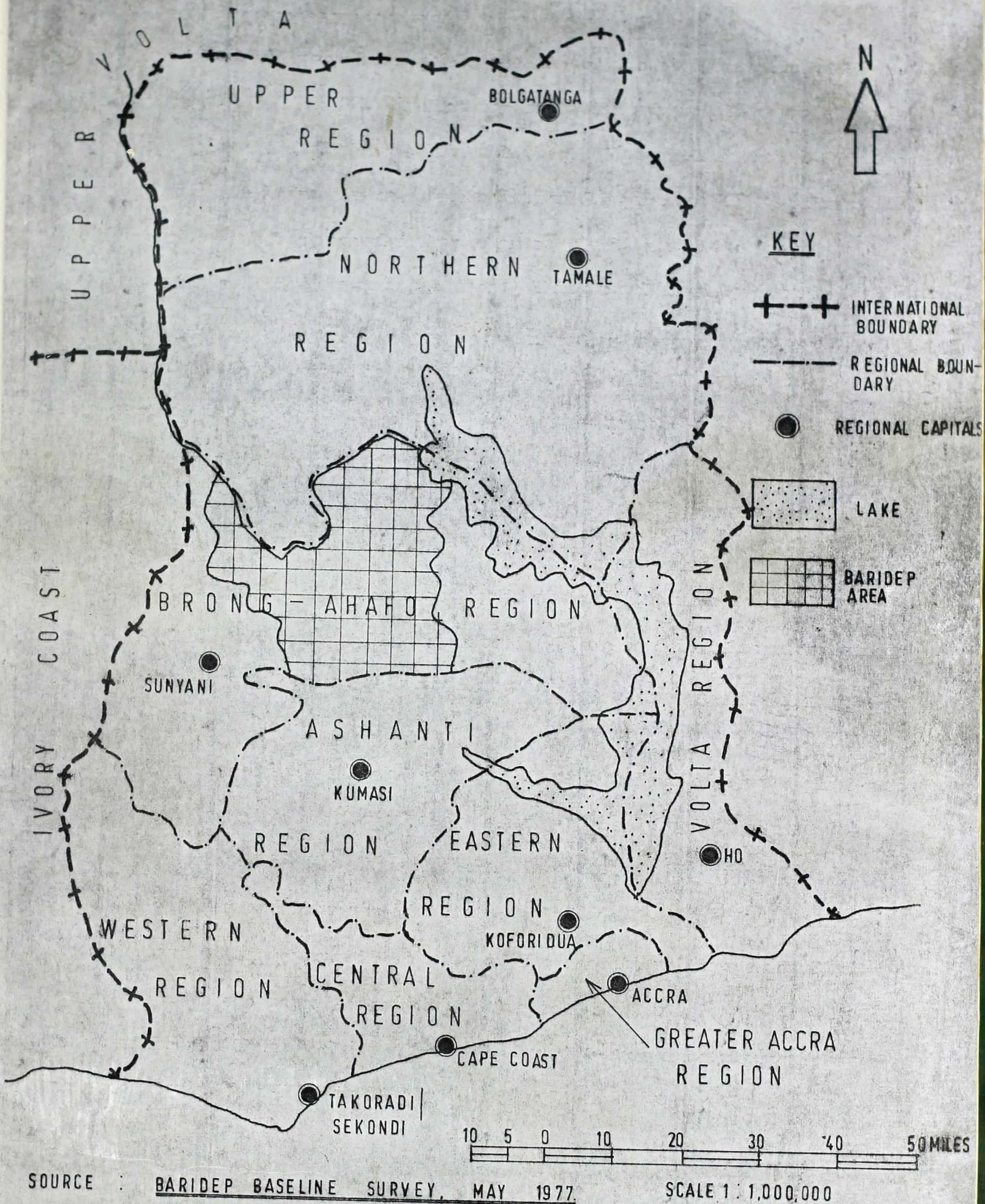
CHAPTER TWO

DESCRIPTION OF THE STUDY AREA

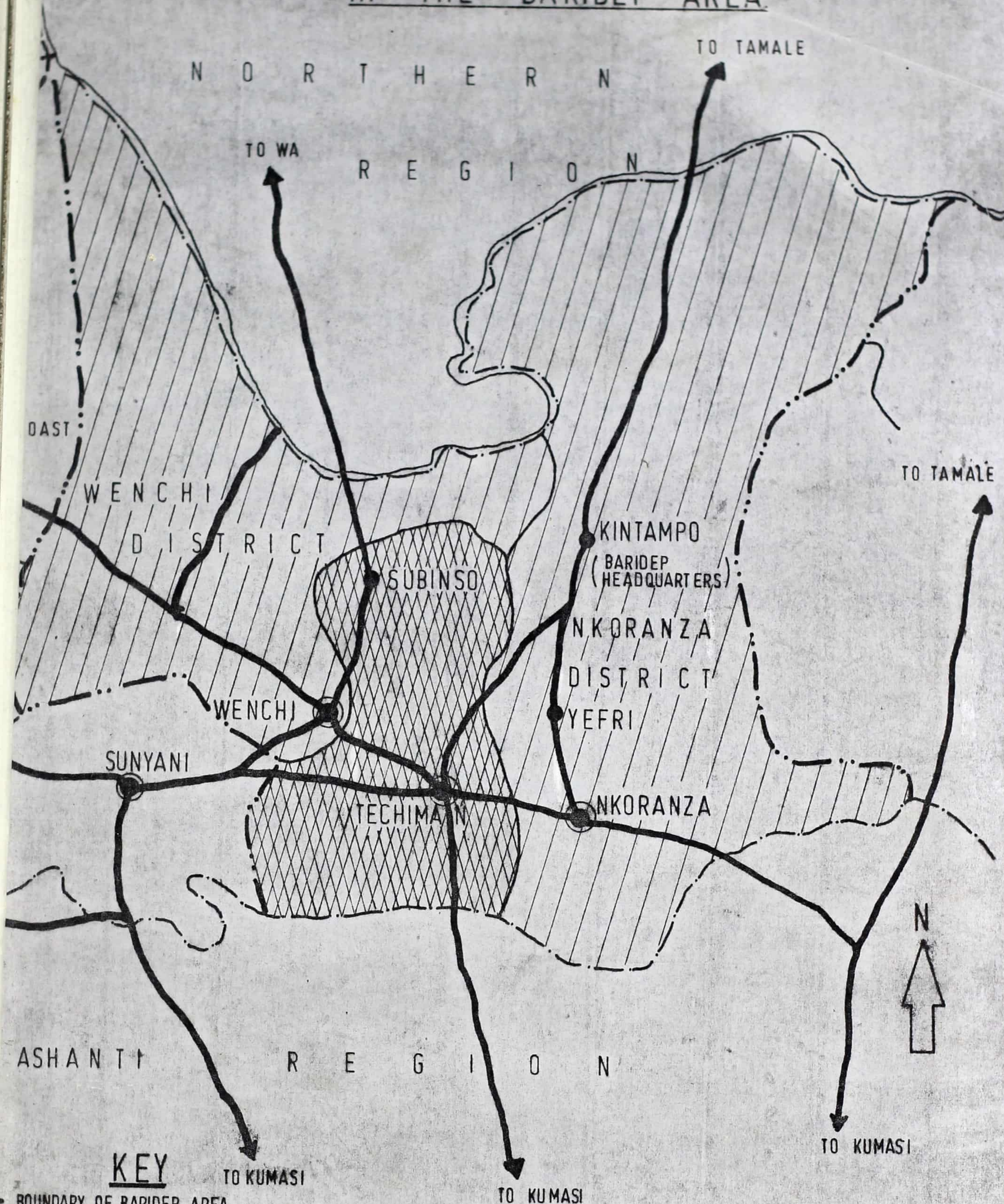
This chapter is meant to give a profile of the study area before the initiation of the BARIDEP. In fact the situation may not be very different now. The chief source of data was the 1970 population census data. Projections have been made as regards data whose present (1982) values are needed. Some background information is given on why the Brong Ahafo region and the BARIDEP area was chosen. This is followed by detailed profile of the study area - Techiman District. The information on relief, climatic and edaphic conditions in the District have been made brief since detailed information on them are irrelevant. The information presented in the chapter may give the reader some idea of the socio-economic conditions in which the BARIDEP operated. This is essential since the programme is experimental and may be replicated in other areas. Such information may also be necessary if the achievements and failures of the BARIDEP are to be fully understood. Items include: location, size, climate, soil, population, principal occupation, health and other facilities and etc.

At the time of planning of the BARIDEP it was decided by the planners - (WHO officials and officials of the Ministry of Health) that the operational area should be the former Wenchi District, now broken up into the Wenchi, Techiman and Nkoranza Districts; (Ref. to Maps 1 and 2) with the headquarters at Kintampo. The choice of the operational area carefully considered. There was the need and desire to have a rural area as typical as possible for Ghana and for other neighbouring countries where the experience from the BARIDEP is likely to be applied.

MAP I: GHANA: LOCATION OF BARIDEP AREA — FORMER WENCHI DISTRICT IN BRONG-AHAFO REGION.

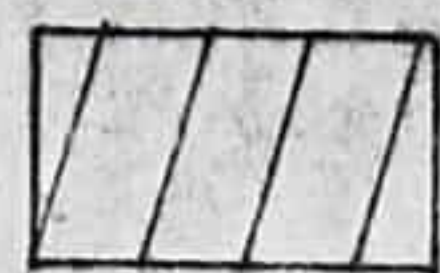


MAP II. LOCATION OF STUDY AREA—TECHIMAN DISTRICT IN THE BARIDEP AREA.



KEY

- BOUNDARY OF BARIDEP AREA
- DISTRICT BOUNDARIES
- REGIONAL BOUNDARIES
- MAIN ROADS
- DISTRICT CAPITALS



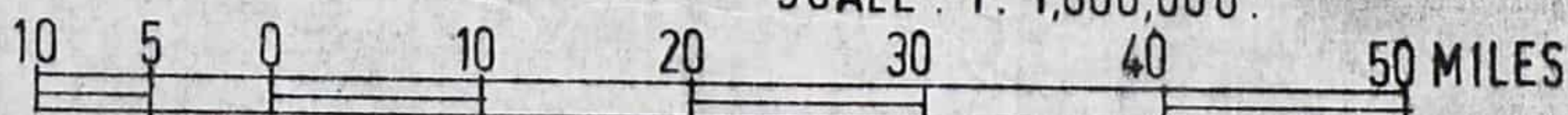
BARIDEP AREA



TECHIMAN DISTRICT.

SOURCE : BARIDEP OFFICE—KINTAMPO.

SCALE : 1" 1,000,000.



Kintampo was chosen though other bigger towns which had more social amenities and are all paramount centres were around. For example in 1970 while Kintampo had a population of 7,149, Wenchi had 13,836, Techiman 12,068 and Nkoranza 7,151. Kintampo was considered appropriate for the following reasons:

1. The Ministry of Health had the necessary housing and support facilities.
2. Since 1945, Kintampo has been the national centre for training auxiliary health personnel - Health Centre Superintendents, Sanitary Inspectors.
3. The regional medical stores for the Brong Ahafo region is located in the town and the acquisition of drugs and equipment may not be difficult.
4. It was envisaged the availability of training facilities would help greatly in preparing governmental personnel for the community Involvement Approach adopted by BARIDEP.
5. Kintampo was considered appropriate because there is a long standing dispute between the traditional authorities of Nkoranza and Techiman and the refusal of each to "go under" the other. Their capitals are Techiman and Nkoranza, Kintampo is considered a neutral town by both parties because the town grew from an old British army barracks.

It is worthy of note of the above listed points in choosing a suitable location as the headquarters of any similar programme under the Primary Health Care System.

The BARIDEP (now) covers three administrative districts - Wenchi

District with its capital at Wenchi, Techiman District with its capital and the Nkoranza District with its capital removed from Kintampo (1973) to Nkoranza, the paramount centre. But the people around Kintampo though belong to the Nkoranza traditional area, have teamed up with the Mo people to fight for another district council whose capital will be Kintampo. Thus four instead of three districts are often mentioned in the text.

2.1. THE TECHIMAN DISTRICT COUNCIL AREA (the study area)

The Techiman District covers 447 square miles (1,158 sq.kms) out of total BARIDEP area of 5,686 square miles (14,728 sq.kms). Thus it occupies about 8% of the total BARIDEP area. It is located at the South-Central part of the programme's area - (See Map 2). The total population of the District in 1970 was 53,127 i.e. 24% of the total for the BARIDEP area. This population is now (1982) projected to 77,530 using the districts average growth rate of 3.2% per annum. About 44% of the 1970 Population was dependent i.e. from 0-14 years and about 70 years. The working population by the time mentioned was about 49%. The density of population per square mile was about 119 (or 46 per sq. km). The number of males to females or sex ratio was about the same - 1.014 males : 1 female. Other important features on population in the District is found in Tables 1 and 2 (attached).

Techiman District like the other BARIDEP areas lies with the Sudan Savannah climatic zone. The annual rainfall is about 62 ins. (1575 mm) but the rain is limited to March - November, Thus there is a dry season usually commencing about mid-November and lasting till March i.e. about 4 months. Though the annual rainfall distribution remains fairly constant, wide annual fluctuations total are quite common. This, when happens adversely affects agricultural production and water supplies and most people suffer. Temperatures are always high enough for economic activities. The mean for the coldest

TABLE 2

AGE DISTRIBUTION BY SEX OF THREE LOCAL COUNCIL AREAS IN BARIDEP AREA - 1970 CENSUS

AGE CATEGORIES	NKORANZA LOCAL COUNCIL				TECHIMAN LOCAL COUNCIL			
	MALES		FEMALES		MALES		FEMALES	
	No	%	No.	%	No.	%	No.	%
Under 1 yr.	1 342	3.7	1 299	3.8	1 059	3.9	1 117	4.3
1 - 4 yrs.	5 638	15.5	5 644	16.5	4 305	15.9	4 235	16.3
5 - 9 "	5 680	15.6	5 660	16.6	4 343	16.0	4 497	17.3
10 - 14 "	4 197	11.5	3 858	11.3	3 154	11.6	3 133	12.0
15 - 24 "	6 000	16.5	5 857	17.2	4 795	17.7	4 665	17.9
25 - 44 "	8 761	24.0	7 798	22.6	6 274	23.2	5 757	22.2
45 - 64 "	3 407	9.3	2 831	8.3	2 152	7.9	1 881	7.2
65 and over	1 423	3.9	1 250	3.7	1 033	3.8	727	2.8
TOTAL ALL AGES	36 448	100.0	34 107	100.0	27 115	100.0	26 012	100.0

Source: 1970 Population Census of Ghana, Vol. II, Statistics of Localities and Enumeration Areas, Accra; June, 1972.

TABLE 2 (CONT'D.)

AGE CATEGORIES	WENCHI LOCAL COUNCIL				COMBINED BARIDEP AREA			
	MALES		FEMALES		MALES		FEMALES	
	No.	%	No.	%	No.	%	No.	%
Under 1 yr.	1 597	3.2	1 657	3.4	3 998	3.5	4 073	3.8
1 - 4 yrs.	8 049	16.1	8 059	16.8	17 992	15.8	17 938	16.6
5 - 9 "	8 693	17.9	8 578	17.9	18 716	16.5	18 735	17.3
10 - 14 "	5 591	11.2	4 756	9.9	12 942	11.4	11 747	10.9
15 - 24 "	7 975	15.9	7 749	16.2	18 770	16.5	18 271	16.9
25 - 44 "	10 974	21.9	11 240	23.4	26 009	22.9	24 705	22.9
45 - 64 "	4 735	9.4	3 960	8.3	10 294	9.1	8 672	8.0
65 and over	2 522	5.0	1 956	4.1	4 978	4.4	3 933	3.6
TOTAL	50 136	100.0	47 955	100.0	113 699	100.00	108 074	100.0
ALL AGES								

Source: 1970 Population Census of Ghana, Vol. II, Statistics of Localities and Enumeration Areas, Accra; June, 1972.

TABLE 3
POPULATION BY SIZE OF LOCALITY FOR THREE LOCAL COUNCIL AREAS IN BARIDEP
AREA - 1970 CENSUS

POPULATION BY SIZE OF LOCALITIES	NKORANZA LOCAL COUNCIL			TECHIMAN LOCAL COUNCIL			WENCHI LOCAL COUNCIL			COMBINED BARIDEP AREA		
	No. of Locali- ties	Pop.	% of Total Pop.	No. of Locali- ties	Pop.	% of Total Pop.	No. of Locali- ties	Pop.	% of Total Pop.	No. of Locali- ties	Pop.	% of Total Pop.
Under 100	309	6960	9.9	393	8005	15.1	376	9271	9.5	1078	24226	10.9
100 - 199	31	4224	6.0	37	5222	9.8	50	6989	7.1	117	16435	7.4
200 - 499	35	10826	15.3	26	7607	14.3	54	17012	17.3	115	35445	16.0
500 - 999	21	13868	19.7	6	4033	7.6	33	23253	23.7	60	41154	18.6
1000 - 1999	12	15729	22.3	6	7648	14.4	11	14287	14.6	29	37664	17.0
2000 - 4999	2	4618	6.5	3	8544	16.1	5	13443	13.7	10	26605	12.0
5000 - 9999	2	14340	20.3	-	-	-	-	-	-	2	14340	6.5
10000 - 19999	-	-	-	1	12068	22.7	1	13836	14.1	2	25904	11.7
TOTAL	412	70555	100.0	472	53127	100.0	530	98091	100.0	1414	221773	100.0

Source: 1970 Population Census of Ghana, Vol. 1, The Gazetteer, Accra, December, 1973.

month is 27°C and the hottest 33°C . But because the period of high temperatures coincides with the low or no rainfall, the incidence of drought is common in the District (like other BARIDEP areas). Bush fires have an annual affair destroying farms settlements and property. Concluding on the climate of the study, it must be mentioned that the rainfall in the area has the following problems, the frequency is often low, the intensity is too high and the amounts are low. Thus it is not dependable. Thus the vagaries of weather have very adverse effects on agriculture, the chief occupation of the people. This situation has put many people in a cycle of poverty.

However, unlike its climatic conditions which are described by agriculturalists as not so favourable to agriculture, the Techiman District has quite suitable land for large scale agriculture - arable or otherwise and even under mechanization too. The District is found in a moderately undulating plateau about 1200 ft (360m) above sea level. The land provides adequate subsurface drainage and dissected by the headstream of the Tano, Subin and Trome rivers. The soils in the area developed from mainly Voltaian sandstones have good internal and external drainages. The uniformity of depth, structure and texture as well as the undulating relief, and the porosity of the soils combine to make the Techiman District (the whole BARIDEP area) one of the few areas in Ghana with very fertile soils. About 75% of the whole District is described as very fertile.¹

Other features of the soils in the area which make it ideal for arable agriculture is as follows: (1) The soils lend themselves readily to mechanized agriculture because there are no rock outcrops or stone profiles (2). The rooting qualities of the soils are good; and (3) the

¹ Ministry of Agriculture, Extension Division Techiman, Brong Ahafo June, 1981.

tilt and nutrient status can easily be improved when necessary by the application of farm yard manure or chemical fertilizer. It is therefore not surprising that agriculture is chief occupation of the people. But agriculture faces the problem of water though the soils are rich and the population density low to allow plenty of land.

2.2. AGRICULTURE IN THE TECHIMAN DISTRICT

Land in the District is vested in the stool, with Nana Techimanhene as the custodian. There are freehold and leasehold systems of land tenure, with "Abunu" - where the tenant farmer takes 50% of produce and the rest goes to the landlord and "Abusa" - where the tenant farmer takes 33% obtaining in some parts of the area. The freehold (for mainly indigenous people) is the most dominant system of land tenure in the district.

A stranger (non-indigenous) in need of farming land, other than that of cocoa or a permanent trees crop, approaches a chief of the village who gives him a portion of land for a customary fee of fourteen cedis seventy pesewas (14.70) and a bottle of schnapps (gin).² With this payment the stranger has the right to cultivate the land for the length of period he lives in the village subject to good behaviour. There is no share-cropping in this case.

On the other hand the land tenure systems of "Abunu" and "Abusa" with their practice of share-cropping obtains in the cocoa growing parts of the district - mainly the Western and South-western parts.

Land acquisition is flexible in the District (See Table 3). This is probably so because of the relatively low population. Thus most government workers and strangers (non-indigenous people) in the area are able to take to part-time farming. Chiefs and most individuals are always willing

²Techiman Traditional Council Records 1974.

to give land for people to farm. With this, one would conclude that land acquisition in the Techiman District for farming purposes is no hindrance to development.

TABLE 3
LAND ACQUISITION, LOCAL COUNCIL AREA AND
NUMBER OF VILLAGES

NATURE OF SYSTEM	TECHIMAN		NKORANZA		KINTAMPO		TOTAL	
	No.	%	No.	%	No.	%	No.	%
RIGID	3	19	5	20	2	10	17	28
FLEXIBLE	13	81	20	80	17	85	43	70
NOT ANSWERED	-	-	-	-	1	5	1	2
TOTAL	16	100	25	100	20	100	61	100

SOURCE: BARIDEP, Baseline Survey - Kintampo 1978.

2.3. LABOUR SUPPLY IN THE DISTRICT

The increased agricultural activities in the Northern sector of the country through the provision of irrigation dams, bullock ploughs and etc. seem to have contributed to the decline of migrant labour to the south and hence to the Techiman District. As Table 4 shows, the migrant labourers are almost exclusively Northerners. The tenuous supply of migrant labour coupled with the serious level (75%) of rural-urban migration of young people (especially graduates of the Middle School) in search of white colour jobs, compound the problem of labour supply in agriculture in the district. The few labourers available charge prohibitive fees for their labour (save the PNDCs - the ruling government's appeal to reduction of prices generally). Labour supply is a very outstanding constraint to agriculture in the District as the survey for this thesis has shown.

TABLE 4(A)

LABOUR SUPPLY IN AGRICULTURE IN TECHIMAN DISTRICTComposition of Migrant Labour in 31 Villages

Ethnic Group	No. of Villages having them	% of Total
Dagomba	15	48
Frafra	1	3
Grunshi	2	7
Moshie	6	19
Sissala	2	7
Others	5	16
Total	31	100

*Source: Author's Survey Nov. - Dec. 1981

TABLE 4(B)

Availability of Day Labourers for Clearing and
Harvesting

Labour Situation	No. of Villages	% of Total
Abundant	1	6
Sufficient	3	19
Insufficient	10	63
None at all	2	12
Total	16	100

Source: Author's Survey Nov. - Dec. 1981.

RURAL-URBAN MIGRATION OF YOUTHS - TECHIMAN DISTRICT

MIGRATION LEVEL	NO. OF VILLAGES	% OF TOTAL
Serious	12	75
Not serious	4	25
None at all	0	0
TOTAL	16	100

*Source - Author's Research Survey No. - Dec. 1981.

2.4. MAJOR OCCUPATIONAL STRUCTURE IN TECHIMAN DISTRICT

Three major groups of occupations dominate the employment structure in the district. These are farming, trading and government employment. Of the 80 people sampled/interviewed, 39 of them (49%) were farmers, 18 said they were traders/craftsmen (22%) and the rest 23 government employees (29%).

Farming activity is engaged in all villages. Individual farmers do not cultivate on a very large scale but rather for home consumption. The little surpluses accruing are sold at the Techiman market, the largest market centre in the country. Most farmers cultivate food crops including maize, cassava, plantain, groundnuts and cocoyam. However, yam, cassava, fruits and vegetables are also grown for cash. Other cash crops grown are cotton, tobacco, kenaf fibre and cocoa. But the chief among them is cocoa.

2.5. AGRICULTURAL INPUTS

Knowledge about the benefits of agricultural inputs is widespread but their use in the Techiman District cannot be rated as high (Refer to Table 5). This situation is attributable to the inavailability of the

but not the high prices at which they are normally sold. For example a 50kg bag of fertilizer (NPK 15:15:15) was selling at ₵140.00 at the black market instead of a control price of ₵25.00 in March, 1982. But farmers were prepared to buy. However, the few farmers who grow tobacco, cotton and kenaf fibre get inputs because they are supplied normally on credit by the buying agents.

TABLE 5

INDEX OF AGRIC. INPUTS USED IN TECHIMAN
DISTRICT COUNCIL AREA

INDEX RATING	NO. OF VILLAGES	% OF TOTAL
High	0	0
Medium	8	50
Low	8	50
TOTAL	16	100

*Source: Author's Research Survey Jan. 1982.

Knowledge about the advantages of ploughing fields is widespread but again very few farmers get tractor services during the farming season. In most cases they get the services very late leading to poor yields because farming in the district relies wholly on (natural) rains and not on irrigation. Tractor services are difficult to get because most farmers are poor and cannot afford the prohibitive costs of tractors. The practice of the use of bullock ploughs is completely absent in the District, for very few farmers keep livestock in addition to arable cropping. The limited tractor services are offered by the produce buying agents - Ghana Tobacco Company, Cotton Development Board, the Bast Fibre Board and the Grains Development Board, who operate in the area. But few rich private individuals

also hire out their tractors after having finished ploughing their own farms.

The main agricultural tools used by the people in the study area are hoes and cutlasses. Institutional help in the provision of farming implement is negligible. Farmers in the district procure their implements from private commercial shops in Techiman, Sunyani or Kumasi. Most of them complain of difficulties in securing the tools. These complaints stem from prohibitive prices, travelling long distances and sometimes the non-availability of the tools. The use of the traditional implement for clearing, planting and harvesting waste much time and energy of the farmer and is contributory factor in the low agricultural productivity and hence low incomes of most farmers in the area.

2.6. AGRICULTURAL FINANCE

Farmers in the Techiman District primarily rely on themselves for meeting financial needs. The Agricultural Development Bank had just been opened, since August 1981 and there is only one Rural Bank at Subinso. There are also only two Banks - Ghana Commercial Bank and the Ghana Co-operative Bank in Techiman, the District capital. All the Banks in the District have engendered almost complete disenchantment among most of the farmers in the area as a source of farm credit. This is because all of them have very rigid institutional procedures, demand first class collateral securities and give insufficient loans.

Still more, any delay in payment of a Bank loan mostly results in a rigorous military drilling and by force payment, often with other penalties. Private money lenders can be correctly described as usurers, and most farmers in the District thus have very low scale or no business with them. There is virtually no functioning Co-operative in the District save the Techiman Area Teachers' Credit Union and the Co-operative Distillers of Akpeteshie - (a local gin).

2.7. GOVERNMENT SERVICESTABLE 6INDEX OF SOCIAL INFRASTRUCTURE IN THE 3 DISTRICTS
OF THE BARIDEP AREA

RATING	NKORANZA		TECHIMAN		KINTAMPO		TOTAL	
	No.	%	No.	%	No.	%	No.	%
HIGH	-	-	-	-	-	-	-	-
MEDIUM	-	-	4	25	2	10	6	10
LOW	25	100	12	75	18	90	55	90
TOTAL	25	100	16	100	20	100	61	100

*SOURCE: BARIDEP, Baseline Survey 1973 Kintampo.

Government services to the villages in the Techiman District are trifling. In table 6 above nearly all of the sampled villages rate 'low' on social infrastructure. The government personnel found in any considerable quantities are teachers and Produce Buying Agency workers - cocoa, tobacco, maize and cotton. The rest are either fewer in numbers or prefer to live in Techiman the district capital. The extent of deprivation of social amenities like pipe-borne water, electricity, postal services etc., are nearly absolute.

Apart from Techiman town (with an estimated 1982 population of 17,660), the rest of the total population 59,869 or 77%, drink from rivers or streams. Even with Techiman town the water supply is unable to cater for all sections of the people. The portable water supply in the town is affected by the fact that it is the largest market in the country. It is estimated that about 40,000 people attend the market every Friday.²

²Techiman District Council Report May, 1982.

The Holy Family Hospital, the only large medical facility in the District, relies on a borehole. The only secondary school in the area relies on a nearby stream.

Of the four central government agencies in the District: Social Welfare & Community Development, Health and Agriculture, only the Ministry of Health seems to have done moderately well in attending to the villages. The rest have performed unsatisfactorily, especially the Departments of Social Welfare and Community Development. Visitations by Social Welfare Officers are infrequent and the services they provide - Adult Education, advising on general development matters, and provision of building materials; are done on a very low scale. Though visitations by Agricultural officers are also quite infrequent, their services in helping farmers improve their production and management practices are on a little wider scale (See the Table below).

TABLE 7

INDEX OF PERFORMANCE OF THE DEPARTMENT OF SOCIAL WELFARE AND COMMUNITY DEVELOPMENT IN TECHIMAN DISTRICT

Rating	No. of Villages	% of Total Villages
High	1	6
Medium	2	12
Low	13	82
TOTAL	16	100

*Note: The two Departments are now separated

*Source: Author's Research Survey, January, 1982.

TABLE 8

33

INDEX OF PERFORMANCE OF THE MINISTRY
OF AGRIC IN TECHIMAN DISTRICT

RATING	NO. OF VILLAGES	% OF TOTAL
High	2	13
Medium	5	31
Low	9	56
TOTAL	16	100

Source: Author's Research Survey January, 1982.

TABLE 9

INDEX OF PERFORMANCE OF MINISTRY OF HEALTH
IN TECHIMAN DISTRICT

RATING	NO. OF VILLAGES	% OF TOTAL
High	0	0
Medium	5	31
Low	11	69
TOTAL	16	100

Source: Author's Research Survey, January, 1982.

As regards health, the various personnel - Health Inspectors, the Public Health Nurses, the Community Health Nurses and personnel of the Medical Field Units, do some visitations.

2.8. THE HEALTH SITUATION IN TECHIMAN DISTRICT

The health situation in the district may be described as poor. The main health problems in the District according to the 1981 Holy Family Hospital Report³ is quoted by the Hospital Secretary as follows in rank order.

³ Holy Family Hospital, Techiman - Hospital Report 1981 (Unpublished) by courtesy of Sister Mary Anne, P.N.O.

- | | |
|---------------------------------|--------------------------|
| 1. Malaria | 7. Eye Diseases |
| 2. Gastro enteritis | 8. Onchocerciasis |
| 3. Respiratory tract infections | 9. Ear Diseases |
| 4. Skin Diseases | 10. Measles |
| 5. Helminthiasis | 11. Enteric Fever |
| 6. Trauma | 12. Anaemias - under 50% |

There are only two hospitals in the District - Holy Family and Ahmadiyya. They are all church/religious missionary hospitals and are located in Techiman. Ahmadiyya is quite small even relies on only auxiliary staff. There are only two health posts - Tanoso and Subinso. The only public health department in the district is also located at Techiman. In addition to the above, the district has two small private clinics and one private maternity home also all located in Techiman.

Similar to the paucity of health institutions in the District, the situation as regards health personnel is probably worse. At present (May 1982), there are only 44 nurses at the Holy Family Hospital, 8 at the Public Health Department, 2 at Asuo Yeboah clinic (private), 4 at Arm's clinic and Maternity Home (private), 4 at Tanoso and 4 at Subinso; giving a total of 66. This gives a nurse/population ratio of the District as 1:1175. Worse still, there are only four doctors in the district - two at the Holy Family and two (a couple) at Ahmadiyya. The doctor population ratio in the district also thus stands at 1 : 19,383.

The 1981 District Hospital Report (the Holy Family's)⁴ substantiates that the health situation in the District is poor. It reports that most communities have no satisfactory and safe water supply. Most

⁴ op. cit. pp.1

also are without proper latrines and waste disposal facilities. The public Health and Medical Field Unit personnel are not able to do as much as they would, due to lack of vacancies and transport plus limited staff. Still more, the 1980 District Report further indicates that the general nutritional level of the populace is decreasing "due to the increased costs of first and second class proteins."⁵

The research for this paper reveals that more than 75% of the (sampled) villages in the Techiman District travel for distances more than 5 miles (8 kms) to receive medical attention. This situation is deplorable because transportation facilities are very poor and in some areas, non-existent. Apart from the local herbalists (44 of whom have been registered officially), drug retailers and peddlers provide drugs to the villages for various ailments. The knowledge of the peddlers and the safety of the drugs they sell are questionable.

Because of the difficulty in reaching modern medical facilities, many villagers in Techiman District reported that they do resort to self-medication using all kinds of drugs and or to visiting herbalists. When children are sick, the people tend to treat them at home and if that fails go to the herbalists. But most herbalists, it has been reported, lack even the basic hygienic knowledge of preparing drugs.⁶

⁵Holy Family Hospital, Techiman, 1980 Report - Primary Health Education For Indigenous Healers Programme (PRHETIH), p.2.

⁶op.cit. p. 3

In almost all the villages, the majority of pregnant women attend ante-natal clinics. Most of them, however, for lack of transport to hospitals at the time needed, deliver at home and face or experience the concomitant problems.

2.9. ADMINISTRATION (LOCAL)

Most of the people (94%) in the District are Brongs (Bonos). Like other Akan tribes they are divided into seven clans. Towns and villages are (thus) composed of people from different clans. Each clan is headed by an "Abusuapayin" - clan head. These clan heads exercise functions of social control and also organize their members for any development projects in the villages.

In towns and villages, political authority rests with the sub-chiefs, chiefs and the "odikro" - head of the (s) village. The highest traditional political authority is the Paramount Chief - the Omanhene of Techiman.

The Legislative Instrument - 540, 1967 empowered the establishment of Town and Village Development Committees in every town or village in Ghana. Accordingly all towns and villages in the District have these committees - (which are termed Village Development Committees or VDCs for short).

Table 10 shows that 69% of the VDCs in the survey rated 'High' in the performance of village development services. The variables considered in the research study were:

- (a) Action on VDC decisions
- (b) Confidence of village in the committee.
- (c) Frequency of VDC meetings and
- (d) Decision makers of village development projects.

TABLE 10

INDEX OF PERFORMANCE OF VDCs IN THE TECHIMAN DISTRICT

RATING	NO. OF VILLAGES	% OF TOTAL
High	11	69
Medium	4	25
Low	1	6
TOTAL	16	100

Source: Author's Research Survey - May, 1982.

The answers given seems predominantly face-saving and may not reflect the actual state of affairs. This observation is more or less substantiated by the low level of social organization (62%) in all areas (See Table 11). There are very few villages with health, agriculture and Education Committees.

TABLE 11

INDEX OF ORGANIZATION OF VDCs IN TECHIMAN DISTRICT

RATING	NO. OF VILLAGES	% OF TOTAL
High	0	0
Medium	6	38
Low	10	62
TOTAL	16	100

Source: Author's Research Survey May, 1982.

TABLE 12

INDEX OF PERFORMANCE ON DEVELOPMENT PROJECTS BY VILLAGES

RATING	NO. OF VILLAGES	% OF TOTAL
High	0	0
Medium	7	44
Local	9	56
TOTAL	16	100

Source: Author's Research Survey - May, 1982.

There is only a "Fair" performance on development projects by the villages as Table 12 shows; 44% of the villages rated "Medium" and the rest 56% rated as low. Latrines (pit) appear to be the most frequent on village development programmes. Schools - (mud structures with thatch roof) and roads - (bush tracks) also feature prominently. Projects which have been undertaken on low scales and or have been abandoned were constrained by lack of financial and other physical resources. Examples of such projects are electricity and water supplies, market and community centres. Also several villages had to abandon relatively important projects like roads, school blocks etc. for lack of help (external or governmental) because they raise funds for development through special levies as Table 13 reveals. Such levies are about ₦12.00 for male and ₦10.00 for female. The collection is usually difficult because most people are very poor and are unable to pay.

TABLE 13
TECHIMAN DISTRICT : MEANS OF FINANCING DEVELOPMENT
PROJECTS IN VILLAGES

MEANS	NO. OF VILLAGES OUT OF A TOTAL OF 16	% OF TOTAL
Special Levy	13	81
Harvests	5	31
Voluntary Contributions	2	12
Sale (of communal) Labour	4	25
Renting Chairs	11	6
Others	0	0

Source: Author's Research Survey - May 1982.

NB: Figures in column 2 show the number out of a total of 16 and the % of column 3 was obtained by finding the % a figure in column 2 over 16 gives.

2.10. PRIORITY NEEDS OF VILLAGES IN THE STUDY AREA

The perception and priority problems of the villages in the study area is presented in Table 14. A sizeable number of them (36%) identified water, school blocks and roads as their priority choices. However, to the villagers agricultural inputs, electricity and postal services could be done without, at least, for the time being. This is true because their farmlands are fertile and also the literacy level is low. What interests most of them is good drinking water, health facilities, preferably a health centre or hospital and good access roads.

TABLE 14
BANK ORDER OF PRIORITY PROBLEMS OF VILLAGES IN TECHIMAN
DISTRICT

FELT NEED	1ST ORDER		2ND ORDER		3RD ORDER		4TH ORDER	
	No.	%	No.	%	No.	%	No.	%
Drinking Water	13	21	7	11	12	20	7	11
Good Access Roads	12	20	6	10	10	16	8	13
School Blocks	22	36	16	26	5	8	3	5
Hosp./H'th posts Clinics	9	16	17	28	14	23	9	15
Post Office - Police Post	1	2	0	0	1	2	4	7
Farm Credit loans	1	2	4	7	3	5	7	11
Agric. Inputs	0	0	0	0	2	3	3	5
Elect. supplies	0	0	1	2	7	11	4	7
Latrines	0	0	1	2	3	5	6	10
Others	0	0	0	0	0	0	0	0

Source: Author's Research Survey May, 1982.

EVALUATION OF THE VILLAGE COMMUNITY FARMS ESTABLISHED
UNDER THE BARIDEP IN TECHIMAN DISTRICT

3.0. Background: The objective of development in the ideal should be the desire to raise the quality of life and to bring about greater involvement of the people in the political, social and economic processes that impinge upon their daily lives.

As observed by Todaro, development in all societies must have at least the following three objectives:

- . to increase the availability and widen the distribution of basic life-sustaining goods such as food, shelter, health and protection of all members of society.
- . to raise levels of living, including, in addition to higher incomes, the provision of more jobs, better education and more attention to cultural and humanistic values.
- . to expand the range of economic and social choice to individuals by freeing them from servitude and dependence not only in relation to other people and nation states but also to forces of ignorance and human misery.¹

In consonance with attempts to redefine development to connote not only economic growth but also improvements in all aspects of life, priorities of development have changed. The basic change has been for community development.

Since the ultimate aim of development strategy is human progress in terms of better living standards, development must be brought to the rural masses at the village level where one might expect a much greater degree of popular participation in the development process.

The development process in Ghana is thus often aided through self-help projects. The goals of the self-help projects are achieved through

the adoption of different types of approaches towards rural development though basically all are community - involving in character. In the approach the local community is considered as the basic unit of the development, with social and economic development mainly depending on their own efforts, initiative and the utilization of locally available resources including labour force. Government support is limited to the inputs that the community cannot provide. Thus the level of government support is minimal.

Community farming is one of the approaches to community development adopted by the BARIDEP in its operation. A community farm is defined as a farm collectively set up, owned and managed by members of a community/village who work on it on fixed days.²

There is the need to evaluate BARIDEP's community (farms) development approach in order to identify and assess problems, successes and their general effects. The need for evaluation and monitoring becomes important especially when a 'foreign' agency - WHO and the Swedish International Development Agency (SIDA) as well as government grants aid especially on bilateral basis. The agency, government or both (would) wish to find an opportunity to carefully examine the programme in the light of the set objective(s), reflect on the nature of the accomplishment and problems and consider (possible) extensions of the programmes - BARIDEP to cover other areas. (Note the Primary Health Care strategy for health development in Ghana now stems from the experience of the Danfa Project and some initial experience of BARIDEP.

The main objective of this chapter is to examine and evaluate BARIDEP's community Farms in the Techiman District of Brong Ahafo region. Data for the chapter is from the author's research and BARIDEP's Base Line Survey, 1975.

²BARIDEP, Baseline Survey, 1975 Kintampo (unpublished)

The basic aims of the research/survey and hence this chapter are to assess:

1. How the idea of community farming as conceived by BARIDEP was brought to the villages of the District.
2. How the community farms were organized and managed by the communities - past and present.
3. The effects of the roles of external agencies - BARIDEP, Government departments - Ministry of Agric. etc. on the community farms.
4. The economic evaluation of the community farms with respect to costs, returns (net incomes), crops grown, size and number of farm holdings.
5. The social impact of the community farms on the rural communities
6. The constraint to community farming, and finally to make conclusions and recommendations.

The programme design or logical framework of the idea of community farms is attached in the appendix. The criteria of evaluation is the 'Assumptions' and 'Objectively Viable' Columns. These are going to be weighed against the 'Narrative Summary' Column both vertically upwards from below and horizontally, from left to right.

It must be stressed again that the thesis adopts the Goal Model Approach to evaluation and in most cases Tripoli et al's model.³

3.1. VILLAGE ORGANISATION OF COMMUNITY FARMS

A Community Farm may be defined as a farm collectively set up, owned and managed by members of a community/(village) who work on it on fixed days.⁴ Proceeds from such a farm are (to be) paid into the community chest.

³ Tripoli T. Fellin P. & Epstein T.; Social Programme Evaluation - Itasca, Illinois, F.E. Peacock publishers, 1971.

⁴ BARIDEP - Village characteristics 1975 (Unpublished).

to be used to finance projects for the whole community. A community farm differs from the idea of modern co-operatives in the sense that it is owned by all the interested and active members of a community. In fact, it is imperative that a resident of the community in which it is going on joins. The idea also differs from the "Nnoboa" - literary meaning 'help weed', by which the men of a community join together as a labour force and work for other individuals who need labour to do some particular type of work.

The idea of community farming was initiated by a one day school organized for all the villages (compulsory) in the BARIDEP area by the Department of Social Welfare and Community Development (now separated) and the Ministry of Agriculture at Kintampo (BARIDEP headquarters) in November, 1975. The Regional Commissioner of the Brong Ahafo Region was the Chairman for the occasion. Each village was represented by some members of their Town/Village Development Committee and the chief. The sources of help from the government and BARIDEP in setting up the farms were explained to the people. Speeches were made to explain the idea (innovation) and to motivate the people. It was announced that the government was prepared to make available machinery to the first four villages which embarked on the development of the community farms. The Ministry of Agriculture was to give seeds/seedlings and technical advice on the cultivation of crops. Fieldworkers of the former Department of Social Welfare and Community Development and the Ministry of Agriculture were sent out to the villages to discuss with and motivate the Town/Village Development Committees to set up community farms.

3.2. SETTING UP COMMUNITY FARMS IN THE VILLAGES

It is common practice for a village in rural Ghana to emulate a project undertaken in another. Usually such projects are initiated by the government or an outside agency but sometimes by the inhabitants themselves. One objective of the author's research was to find out how the idea of

establishing community farm reached the villagers since this may throw light on the success or failure of the farm.

The author's proposition was that: if a project is established through the initiative of the local people, such a project has a better chance of success than that which was forced on the villagers. The reason is that the rate of adoption of innovation (any idea perceived as new by a population) is related directly to people's perception of its advantages relative to other innovations or the status quo.⁵ Moreover, the innovativeness of a target system (a group or organisation, community or society toward which an innovation is directed) is directly related to the extent to which it feels a need for change.⁶ Discontented target systems are generally more innovative than contented ones.⁷ (Ref. to Important Assumptions Column of Project Design at Appendix).

Asked whether they had heard of the establishment of community farms in any other village or area, 82.4% of the 160 villagers interviewed said "NO". (This may be due to the fact that the rate of adoption of an innovation is directly related to the geographical accessibility of the innovation to the target system.⁸) Out of the 16.8% who had heard of it, 13.6% said they were established in villages in other districts while 3.2% maintained that they heard it over the radio. At Tanoboase (ref. to list of villages with community farms in Appendix) it was discovered that about ten years ago, the village owned a community farm but this was later abandoned because they suspected the leaders of misusing proceeds from the farm. To this village, the idea of community farming was not new when it was introduced.

To the other villages (eleven out of sixteen of the sample) or 66.4% the idea of establishing community farm was introduced by the Department

⁵ Jack Rothman - Planning and Organizing for Social Change: Action Principles from Social Research pp.42.

⁶ Op.cit. pp.42

⁷ Op.cit. pp.43

⁸

of Social Welfare and Community Development through the Town/Village Development Committees. The villagers were initially made to understand that part of the proceeds from the farms would be used to purchase drugs for the community clinics (to be set up by them), pay salaries of allowances of the clinic attendants, and the rest for the provision of social amenities for the village(s). The idea of establishing community farms was whole-heartedly embraced by all the inhabitants because they believed that the (extra) income from these farms would alleviate the onerous taxes and tolls imposed on them for development purposes. Some of the villagers (7 out of 16 or 43%) also believed that since their villages had long been neglected by the government, the establishment of community farms would enable them get government assistance for the provision of social amenities they initiate.

3.3. FARM MANAGEMENT

In each of the villages (16) where the research/survey was conducted, there existed a Town/Village Development Committee before the introduction and establishment of the community farm. The committees had membership between 4 and 7, either all males or with male majority including their chiefs as chairmen of the committees. But in some villages, the chiefs served as ex-officio members. The main functions of the Development Committees were:⁹

1. to see to the general development of the village;
2. to help manage the economic and social affairs of the village;
3. to protect individuals from maltreatment by fellow inhabitants;
4. to provide sanitation in the village;
5. to organize the villagers for group activities and
6. to represent the villages at the district, state and other functions and meetings.

⁹ Local Government Act.

In the course of the survey, it was discovered that the economic importance of such community farms resulted in an increase in the committee membership in each village. The increase ranges from 3 to 7. This increase made room for the inclusion of at least a woman, and also gave the youth the chance to participate in the management and development of their communities.

The committees were entrusted with an additional responsibility for organizing, operating and managing community farms in their villages. In some of the villages (in fact 7 of them) sub-committees within the village Development Committee were formed and entrusted solely with the responsibility of managing the community farms. The following functions of the farm committees are worth mentioning:

- (a) the committee women are in charge of cooking for the villagers, visitors or guests and organizing the village women for communal work;
- (b) in the relatively large villages, (e.g. Nchiraa, Aworowa, Tuobodom, Krobo and Buoyem) the villages are divided into two or more working groups each of which is supervised by a male committee member. The supervisor is to organise the group members gratis on the community farms. When necessary he must also send them to work on private farms for an agreed fee. Large ones also work under the leadership of a woman committee member.
- (c) In some villages - Nsuta, Oforikrom and Tanoboase, there are two separate committees viz. the Village Development Committee and Farm Management Committee with the latter charged with sole responsibility of managing the affairs of the farm.

Asked whether membership on the Farm Management Committee was by election or appointment, 79% of those interviewed (i.e. 10 persons of

each of the sampled 16 villages) said they were always elected by the villagers while about 8% maintained that members were always appointed. Even where members were appointed by the chief and elders (Kuntunso) the citizens were allowed to cast a vote on them. This is shown in the Table below.

COMMUNITY OFFICER'S APPOINTMENT		
Item	Absolute	Percentage (%)
Elected	127	79.2
Appointed	13	8.2
Self-Appointed only	5	3.2
Self-Appointed and elected	5	3.2
Do not know	9	5.6
TOTAL RESPONDENTS	160	100%

Source: Author's Research Survey Jan. 1982.

The Table below shows that out of the 160 villagers interviewed 130 (about 81%) maintained that the members of the Farm Management were elected by the villagers themselves.

APPROVAL OF NOMINEES OF COMMUNITY FARM APPOINTMENTS

Item	Absolute	%
Chief and elders appoint before the villagers approve	15	9.6
Villagers nominate candidates	130	80.8
Committee nominate candidates	4	2.4
Do not know	12	7.2
TOTAL	160	100.0

Source: Author's Research Survey, Jan. 1982

At every Easter or Christmas the whole community is summoned and to a meeting to take stock of the activities and development projects carried out by the Management Committee. At such a gathering, the financial position of the village is accounted for and the fate of the Committee members is also decided. The villagers may decide to dissolve the committee and elect new members or remove some of the members and replace them with new members as the need arises.

Findings show that usually a dissolution of a committee depends on the following:

1. Suspicion of embezzlement of village funds by members
2. Lack of proper records of village accounts.
3. Inability to initiate development projects in village
4. Misuse of village property
5. Maltreating or being partial to some villagers and
6. Inactivity of a committee which takes no action against those who blatantly refuse to attend communal work.

From the research, it was discovered that the village committee members usually met once a week to discuss village matters. Most of them have a fixed day for such meetings (usually Friday or Sunday mornings). The members however could meet on any other day depending on the urgency of the matter. Decisions taken by the Committee are communicated to the villagers during such general meetings or through a town crier (gong-gong beater). At general meetings, the committee often receive suggestions from the villagers. Where a meeting has not been convened, suggestions could be channelled through any member but the committee is not bound to accept the suggestions.

Some villages like Nchiraa, Tuobodom etc. with large populations (ref to Appendix) are divided into wards with each ward represented on the Farm Management Committee. Decisions taken at the Farm Management

Committee meetings and suggestions from villagers are channelled to the appropriate quarters through the representatives of each ward. Where a village is divided into wards the Community Farm is also done likewise and allotted to the wards. Committee members who disregard the views and suggestions of the community are branded as dictatorial. This is especially true at Tuobodom where out of the 10 people interviewed, 8 expressed the view that the Village Committee was dictatorial.

Despite the onerous duties carried out by the Committee members, the members are not given any remuneration. Out of the 160 people interviewed, 56% were of the opinion that since they were working for their village they should not be given any remuneration. Out of this 56%, 14.3% expressed their reason as that any remuneration given to the committee members would decrease the community's funds. On the other hand 29.6% of the interviewees suggested that because the committee members work very hard organize communal labour, spent a lot of time on the community and etc. they should be given some money to serve as an incentive for them to work even harder but this however was clearly a minority view.

COMMUNITY FARM WORKING DAYS

Except Nchiraa where there is no fixed day for working on community farm, all the sample villages have special days for organizing the community to work on the community farms as shown in table below.

3.4. LABOUR FORCE PARTICIPATION RATE

In some of the villages that the research was conducted especially Tuobodom, it was discovered that migrant groups like Goules, and and Nchiraa do not attend communal work on the community farms. They rather

DAYS FOR COMMUNITY FARM WORK

VILLAGE	DAY
Adutwie	Tuesday
Agosa	Wednesday
Asueyi	"
Tanoboase	"
Oforikrom	"
Buoyem	"
Baamire	"
Nkwaeso	"
Nchiraa	No fixed day
Krobo	Tuesday
Tuobodom	"
Akfofrom	Wednesday
Aworowa	Thursday
Nsuta	Wednesday
Manso	"
Kokroko	Friday

Source: Author's Research Survey.

Prior to the working day, a gong-gong is beaten the previous night to inform the people where each group is supposed to go to work the next day. At the farm the men usually clear the bush, remove stumps, make mounds and women do the planting. At times, especially when jobs must be done quickly, both the men and women do the same work.

It was discovered during the research that at Aworowa and Duoyem those who could not go to the farm had their portion reserved for them until they can find time to do it but before the next working session

3.4. LABOUR FORCE PARTICIPATION RATE

In some of the villages that the research was conducted especially Tanoboase, it was discovered that migrant groups like Gonjas, Mos and Moshies do not attend communal work on the community farms. They rather

paid ₦200.00 annually to the chief as their contribution towards the development of the village. In other villages e.g. Fiaso, Baamire and Manso, these strangers were given special days to undertake communal work,

Both men and women work on the community farms. The recruitment of both males and females to work on the community farms depends on their physique and employment status. If a person has completed Middle School but is small in size and is also not in gainful employment he/she is exempted from community farm work. Girls who are exempted from such work are made to do other jobs. The research reveals that the ages of villagers eligible for work on the community farm range between 18 and 56 years. Most villagers expect that at the age of 18, one would have spent some time in gainful employment if one did not attend school; and the age of 56 conforms to the retiring age for civil servants.

LABOUR FORCE PARTICIPATION RATE PER DAY

VILLAGE	1 AV. ATTENDANCE ON COMMUNITY FARM PER DAY			2 AV. NO. ABSENTEES PER WORKING DAY		3 PARTICIPATION RATE	
	Male	Fem.	Total			%	
Nsuta	115	175	1290	3		99	
Asueyi	145	76	221	3		98	
Buoyem	110	150	260	2		99	
Agosa	66	145	211	4		98	
Nchiraa	140	160	300	6		98	
Koase	48	60	108	3		97	
Tanoboase	76	80	156	7		96	
Tuobodom	440	100	540	5		96	
Krobo	118	300	418	4		99	
TOTAL	1228	1246	2404	37			
AVERAGE	139	139	267	4		98	

Source: Author's Research Survey, Jan., 1982.

The survey/research reveals that even though some members of the communities do absent themselves from community farm work, the number is quite insignificant compared with the total adult population of the villages. This is shown in the Table above. The table reveals that villages like Nsuta, Tuobodom, Asueyi, Nchiraa and Krobo have a high average attendance of over 200. None of the villages has less than 100 people to work on the community farm.

Even Koase (See list of villages in Appendix 2) showing villages in the District who have community farms) which had the lowest total average attendance during the research had a 1970 total population of 251. Using the 1970 working population ratio of the Techiman district (See chapter 2) which was 48% one would expect 90% attendance, *ceteris paribus*.

Column 2 of the above table indicates the average number of absentees per working day for the sample villages. This clearly shows that participation on community farms is quite encouraging with rate of absenteeism ranging between 1% and 4%, an overall average of 2% (See column 3).

The reasons for absenteeism are ill-health, impromptu travelling and other unexpected events such as deaths of relatives. If such persons are unable to report for work they seek permission from a committee member. In a few cases (at Tanoboase and Krobo), absenteeism attributed to misunderstanding between some of the villagers and the management committee. In almost all the villages surveyed it was discovered that a minimum fine of ₦20.00 for males and ₦15.00 for females is imposed on any individual who deliberately absents himself/herself from communal (farm) work. This has always been the case even before the BARIDEP. In these villages those who feel they cannot attend communal work for the whole year are permitted (after a tangible explanation) to stay away, provided they pay an annual contribution ranging from ₦200 - ₦400, depending on how convincing their reasons.

3.5. PROBLEMS THAT IMPEDE THE ORGANIZATION OF COMMUNITY FARM WORK

In spite of all the assistance and co-operation given by the villagers to effect the smooth running, organization and progress of the community farm work, the respondents remarked that there were a host of problems that impeded the community farm work. The efforts put into effective organization for the success of the community are thwarted by:

- (a) lack of capital (i.e. insufficient amount);
- (b) delays in providing some basic input e.g. fertilizer
- (c) Weather failure and
- (d) destruction of crops by pests.

Moreover 44.8% of villagers interviewed remarked that lack of tractor services to plough the cleared land often caused late planting of crops or the abandoning of farms (in the major or minor season).

In all the villages visited the committee members complained of the high cost of fertilizers including high transport charges. The high cost of fertilizers made some villages e.g. Krobo and Bowohomodien refuse to apply fertilizers. Others could not purchase them until later when the planting season was almost over.

The villagers suggested that to make the community farms more viable, inputs like tractor services, farm tools, fertilizer and the like should be supplied for purchase or made available at the right time for use. Also agricultural extension services should be made available to them in the implementation of new methods and techniques of farming. Land for farming was found to be posing no problem in the area.

ACQUISITION OF LAND IN THE TECHIMAN DISTRICT

NATURE OF SYSTEM	TECHIMAN		NKORANZA		KINTAMPO		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Rigid	30	18.7	5	20	2	10	37	18
Flexible	130	81.3	20	80	17	85	167	81.5
Not Answered	-	-	-	-	1	5	1	.5
TOTAL	160	100	25	100	20	100	205	100

Source: Author's Research Survey June, 1982.

Nkoranza and Kintampo Data - BARIDEP, Baseline Survey Data 1975.

The assumptions made by BARIDEP's designers for achieving the purpose are summoned as follows: (See Logical Framework attached):

- (a) Most settlements (localities) in the Techiman District are rural and have less than 5000 (by 1975).
- (b) The District has homogeneous pop and organizing communal work will meet little problems.
- (c) Each Town/Village in the District has a Town/Village Development Committee which (would) could be contacted by external agents e.g. BARIDEP's officials.
- (d) The Town/Village Development Committees organize, co-ordinate and supervise communal work and would do the same for the community farms.
- (e) The occupation of most of the villages in the District is farming and community farming will not affect adversely their daily activities.
- (f) If the idea of community farming is forced on the people, it will not work, but that the people would be motivated after having obtained some rapport with them to set up the farms and they would.

Relating the findings of the research against these important assumptions along which the BARIDEP was planned, the following evaluation results come out.

- (1) The 1970 population census data reveal that most settlements or localities had less than 5000 people. Only Techiman town i.e. the District capital had 12068 people. The other larger towns were Tuobodom with 3512 people, Nchiraa with 2285, Aworowa with 2276 and Krobo with 1540 people. There were 472 localities in the district in 1970 with a total population of 53,127. This gives an average of 113 people per locality. In 37% of total population lived in villages of 100 - 200 people. This assumption is thus realistic and the method used by BARIDEP on population in its Baseline data collection is recommendable in any typical rural area.¹⁰
- (2) The homogeneity of population in the District is also proved right. Findings reveal that about 94% of the people in the District were Brongs and the average attendance or participation rate on community farm is 98%. Though there are slight deviations this assumption was also realistic.
- (3) Each town/village in the District i.e. 100% had a functioning Committee which were democratically elected and they played a key role in the initiation, organization and supervision of community farms. However this assumption overlooked the fact that a separate committee - A Farm Committee would be needed for the effective organization of the community farms.
- (4) The research shows that in all the sample villages the Town/village Development Committees were organizing, co-ordinating

¹⁰ 1970 Population Census Vol. II Statistics of Enumeration Areas. Accra, June, 1972.

and supervising village development activities before BARIDEP (Ref. to functions of village development committees at page).

Thus the field staff of BARIDEP and especially the Department of Social Welfare and Community Development, was able to contact explain and motivate them to take to community farming. 66.4% of the sample of 16 villages said the idea of community farming reached them from outside through the Department of Social Welfare and Community Development. Only a few 13.6% picked the idea from other villages and also only 3.2% heard the idea from the radio. Thus about 82.4% of the interviewees (a total of 160) said the idea of community farming was not picked from their neighbours or from the radio. This fact makes BARIDEP "direct contact approach" laudable. However, the fact that only villages which show some enthusiasm or keen interest are contacted falls short of an integrated rural development programme

(5) From the text it is notable that the average number of absentees per day on the community farms ranges between 1% and 4%, with an overall average of 2% (See Table at p.55). This is so because fixed days mostly Wednesday have been set aside for communal farm work. This seems a compromise day since most people in the district attend market at Techiman on Fridays. Most of them are also Christians and don't work on Sundays. Thus the midweek is ideal. Moreover, the idea of ploughing fields and the use of fertilizers is not new in the District since most farmers have grown or are aware of how cotton, kenaf or tobacco farm in orienting people to jobs. More or less most of the people see the work on the community farm as just working on their own new plots. Thus the idea of community farming has had little or no adverse effects on the people as regards their use of time.

(6) The villagers who have functioning community farms in the District embraced the idea when they came to understand that proceeds from the farms would alleviate them from the onerous taxes and tolls which most admitted they don't pay. The taxes and tolls were obligatory and the idea had failed, so most people already felt using force to obtain funds for development would not work. But the idea of the community farming to them had little or no element of "compulsion". This makes BARIDEP's non-application of 'force' in the initiation of the community farms acceptable.¹¹

Thus one could summarize that the assumptions made by BARIDEP regarding the achievement of the purpose/objective of the programme i.e. 83% local Framework are valid. The assumptions were directly developed from the result of the Baseline Survey Data collection of 1975. Thus the extension of the programme to other parts of Ghana or other countries, it is recommended that comprehensive Baseline Survey is done. NB The evaluation of the assumptions for C-3 and C-4 of the Logical Framework appear later in the thesis.

3.6. THE ROLE OF EXTERNAL AGENCIES

External Agencies Involvement in the Community Farm

Among the 160 villagers interviewed about 56% said it was the (then) Department of Social Welfare and Community Development, the BARIDEP, the Ministry of Agriculture and the Holy Family Mission (Techiman Catholic Church) which have taken keen interest in the establishment of the Community Farms. These agencies have various reasons for taking such keen interest

¹¹ Jack Rothman - Planning and Organizing for Social Change : Action Principles from Social Research, pp.43.

in the establishment of community farms in the villages, the most notable of which are:

1. to help to raise revenue for development of the villages
2. to solve the food situation in the villages and hence nutritional problems.
3. to raise revenue to purchase drugs for the community clinics (establish) and to pay the community clinic attendants.
4. to enable villagers to obtain loans or any other form of financial assistance from the external/government agencies and the financial institutions.

For most of the villages with community clinics (N/B all villages which have farms also have clinics) the desire to raise revenue to purchase drugs was the most important motivating factor for the establishment of community farms which, according to the villagers, were initiated and helped by the Holy Family Mission (Catholic) and the Department of Social Welfare and Community Development.

INTERACTION BETWEEN EXTERNAL AGENCIES AND VILLAGES
IN TECHIMAN DISTRICT

FREQUENCY OF VISITS TO VILLAGES BY EXTERNAL AGENCIES

	Nkwaeso	Agosa	Baamire	Asueyi	Nchiraa	Adutwie	Tanoboase	Buoyem	Oforikrom	TOTAL
Not Answered	1	4	0	3	5	1	6	6	5	31
Daily	0	0	0	0	0	0	0	0	0	0
Weekly	0	1	1	0	1	1	2	0	2	8
Fortnightly	0	1	0	0	0	1	0	0	0	2
Monthly	8	8	5	4	4	3	10	0	1	43
Quarterly	1	0	1	0	1	0	0	0	0	3
Yearly	0	2	0	0	1	1	1	0	1	6
At Request	0	0	0	1	0	0	0	1	0	2
Can't tell	1	2	0	12	10	1	3	1	0	30
TOTAL	11	18	7	20	22	8	22	8	9	125

Source: Author's Survey, Jan. 1982

Most of those interviewed maintained that they did not know what form of assistance those agencies intended to give or had given to them since the establishment of the community farm in their village.

At Baamire, Nkwaeso and Adutwie, most of the villagers interviewed (63%) confirmed that these agencies had educated them on the use of modern techniques of farming. The respondents also said the agencies had also helped them in procuring some of the inputs for farms. For all other villages, most of the villagers interviewed could not tell whether these agencies were willing to provide credit facilities to the villages which had embarked on community farming. About 70% of them said they had never asked for loans of any form from these agencies and quite a significant number of them were of the opinion that even if they did they would not be granted. This view seems to be substantiated by the fact that assistance to villages in Ghana are always in the technical form.

In spite of the low frequency of visits to the villages by the external and government agencies, the villagers maintained that the Management Committee members did communicate with some of these agencies especially Social Welfare and Community Development. According to the villages whenever there was a problem to be solved these agencies did not invite the village committee members to Kintampo (BARIDEP headquarters) for advice as shown in the table below.

Evaluating the relevant assumptions made when planning the BARIDEP (See 4-3 of Logical Framework chart attached); it is true that the Department of Social Welfare and Community Development was able to motivate people to set up farms in the villages because it had been working in the District but its visits were few. However, though the familiarity of an external agent may hasten the setting up of a community farm, it is rather the frequent visits that are important for the efficient organisation and maintenance of the farms.

COMMUNICATION BETWEEN EXTERNAL AGENCIES AND VILLAGE
COMMITTEE MEMBERS

	Nkwaeso	Agosa	Baamire	Asueyi	Nchiraa	Adutwie	Tanoboase	Buoyem	Oforikrom	TOTAL
Not Answered	0	4	2	4	7	2	6	6	5	36
Visit to Committee	0	8	4	2	5	5	9	0	1	44
Members in the Village										
Invite C'ttee members	1	1	1	1	0	0	0	1	1	6
Through Post/Messenger	0	0	0	0	0	0	2	0	0	2
Cannot Tell	0	3	0	1	2	1	2	1	2	12
Not Applicable	0	2	0	12	8	0	3	0	0	25

Source: Author's Research Survey.

It is, therefore, the writer's belief that the lack of regular contacts between the external and government agencies and the villagers is attributable to the lack of initiative on the part of these agencies to visit the villagers and the consequent inability of the villagers to make their problems known to these agencies at the right time. Efforts must therefore be stepped up to bridge the communication gap. Furthermore such visits must be used in solving some of the developmental problems which are beyond the capacity of the village development committees.

Evaluating the relevant assumptions made when planning the BARIDEP (See C-3 of Logical Framework chart attached); it is true that the Department of Social Welfare and Community Development was able to motivate people to set up farms in the villages because it had been working in the District but its visits were few. However, though the familiarity of an external agent may hasten the setting up of a community farm. It is rather the frequent visits that are important for the efficient organization and maintenance of the farms.

Moreover, the assumption that the field staff of the Ministry of Agriculture, though few in number were being under-utilized and would therefore be effectively engaged under the community farm idea could also be said not to be realistic. Comparatively most of the villages in the district are accessible and not quite far away, the farthest in the district are from the District capital. Instead of the Agric. officers (though few) visiting the farms, they 'wanted' the farms/villagers to visit them. Also none of the other ministries found in the district have participated so far in community farming; but the following are available, Information. Youth and Sports, Local Government (District Council) Audit Service etc.

3.7. ECONOMIC ANALYSIS ON COMMUNITY FARM

A partial evaluation of the community farms will be made in this section too after their economic analysis. However it may be necessary to refer to C2, C3, a D2 and D3 of the Project Design Summary or Logical Framework on Community Farms (since their being reproduced here would be superfluous).

This subsection attempts to show the economic performance of community farms in the (Techiman District) study area by estimating their costs and Returns and their networth. The major problems affecting their performance will also be tackled. The average Income on Book Value of Investment, the Internal Rate of Return and Cost Benefit Ratio are (may be) other accurate or better techniques. But the Investment Capital Costs of the Community farms are not known.

3.8. GROWTH RATES OF COMMUNITY FARMS

Tables in the appendix show the growth of community farms from 1976 to 1978. It is seen that in 1976 the total acreage of land cleared for the community farms was 56.1 (22.4 Ha) with an average of 4.7 acres (1.88Ha)

per village (N/B only 4 of the villages are Techiman District). This rose to 97 acres (39Ha) in 1977 with an average of 8.2 acres (3Ha) per village showing annual growth rate of 73%. (All villages were in Techiman District). 1978 however showed a remarkable improvement with a total acreage of 207.2 acres (83 ha) and average of 9 acres (4 Ha) per village with an annual growth rate of 113% as shown in the table below.

SIZE AND NUMBER OF COMMUNITY FARMS IN THE TECHIMAN
AND NKORANZA DISTRICT BY YEAR

YEAR	NO. OF VILLAGES WITH FARMS	NO. OF CROP FIELDS	ACREAGE OF 1976 FARMS	AC'GE 1977	ACREAGE 1978	TOTAL
1976	12	12	56.1	-	-	56.1
1977	12	15	56.2	70.9	-	97.1
Jun.1978	21	29	36.4	70.5	100.3	207.2

Source: BARIDEP, Kintampo, 1979.

The average annual growth of community farms from 1976 to 1978 stood at 92%. This may be attributed to the fact that in 1978, tractor services were made more readily available than in the previous years. Also records have it that rainfall was more abundant in 1978 than in 1979 and

As at June, 1978, 18 villages in the Techiman district had community farms. The average population was 995 per village. The average size of the community farms was 9 acres (3.6 Ha) per village. This comes very close to BARIDEP's magnitude of output by April 1978 (See C-2 of Logical Framework Sheet) and to a greater extent the objective was achieved. But the number of villages which had engaged in community farming (18) by June 1978 was far too small compared with the 472 localities found in the District according to the 1970 population census data (See table below). The impact of the innovation then becomes doubtful since it is not clear cut. In any case a village seems bigger than a locality since some villa-

ges had more than one locality during the census.

POPULATION BY SIZE OF LOCALITY 1970 TECHIMAN DISTRICT

POPULATION BY SIZE OF LOCALITIES	NO. OF LOCALITIES
UNDER 100	393
100 - 199	37
200 - 499	26
500 - 999	6
1000-1999	6
2000-4999	3
5000-9999	-
10000-19999	1
T O T A L	472

Source: 1970 Pop. Census of Ghana Vol. 1 Dec. 1973, Accra.

Moreover, findings show that though BARIDEP had all the necessary inputs (See D. 2 of Logical Framework) they hardly reached the villages on time. Tractor services for ploughing in most cases were delayed and there are cases where cleared plots were abandoned because of inavailability of inputs. Therefore it is doubtful whether BARIDEP achieved its objective as regards the provision of inputs.

3.9

NET WORTH POSITIONS OF COMMUNITY FARMSTOTAL ASSETS, TOTAL LIABILITIES AND NETWORTH OF COMMUNITY FARMS AS AT MID-JUNE 1980 IN CEDIS - TECHIMAN DISTRICT

VILLAGE	¢ TOTAL ASSETS	¢ TOTAL LIABILITIES	¢ NET WORTH	EQUITY TO VALUE RATIO
Nchiraa	¢ 4461	¢ 515	¢ 3976	0.89
Buoyem	1739	140	1699	0.98
Asueyi	881	379	379	0.57
Tanoboase	2171	545	1626	0.75
Nkwaeso	6277	255	6022	0.96
Oforikrom	1622	65	1597	0.98
Agosa	466	78	388	0.85
Adutwie	1789	497	1292	0.72
Baamire	N.A.	75	N.A.	N.A.
AVERAGE	2425	283	2142	0.84

* Source: Author's Research Survey No. 1982.

All community farms in the sample villages (above) show positive net worth positions with total assets considerably exceeding total liabilities as shown in the table above. The equity - to value ratio which measures the fraction of total assets attributed to net worth or owner's equity shows very high values with an overall average as 0.84. This simply means that for one Cedi of asset invested, about 84 pesewas was obtained i.e.

$$\frac{\text{Total Networth}}{\text{Total Assets}} = \frac{\text{¢2142}}{\text{¢2425}} = 0.84$$

Also this means total liabilities form about 16% of the value of the total assets and this points to (some) financial instability of the community farms.

However the table below shows that about 99% of the total assets of the community farms are from growing crops.

COMPOSITION OF THE TOTAL ASSETS FOR THE COMMUNITY FARMS
FARMS AS AT MID-JUNE 1980 IN FRACTIONS - TECHIMAN
D I S T R I C T

VILLAGE	TOTAL ASSETS	GROWING CROPS	UNUSED INPUTS
Nchiraa	1.00	0.99	0.01
Buoyem	1.00	0.98	0.02
Asueyi	1.00	1.00	-
Tanoboase	1.00	0.98	0.02
Nkwaeso	1.00	1.00	-
Oforikrom	1.00	1.00	-
Agosa	1.00	0.97	0.03
Adutwie	1.00	1.00	-
Baamire	1.00	-	-
AVERAGE	1.00	0.99	0.01

Source: Author's Research Survey Jan. 1982.

With the difficulty in valuing growing crops and the fact that yield uncertainty is quite high in farming, there may be (it must be admitted), some pessimism in placing confidence in the values assigned to the assets of the community farms. Nevertheless, the total liabilities of the farms are generally low and it is highly possible to expect favourable net worth positions for the farms unless of course there is almost total failure of the growing crops before lowest.

The composition of the total liabilities of the farms indicates that about 83% of them are monies owed for the hiring of tractor services. Loans payable to various other sources rank second in importance as is depicted in the table below.

COMPOSITION OF THE TOTAL LIABILITIES FOR THE COMMUNITY
FARMS AS AT MID-JUNE, 1980 IN FRACTIONS - TECHIMAN DISTRICT

VILLAGE	TOTAL LIABILITIES	HIRING OF TRACTOR SERVICES	LOANS	BORROWED INPUTS
Nchiraa	1.00	1.00	-	-
Buoyem	1.00	1.00	-	-
Asueyi	1.00	0.94	-	0.06
Tanoboase	1.00	0.26	0.48	0.26
Oforikrom	1.00	1.00	-	-
Agosa	1.00	1.00	-	-
Adutwie	1.00	0.33	0.67	-
Baamire	1.00	1.00	-	-
AVERAGE	1.00	0.83	0.13	0.04

Source: Author's Research Survey January, 1982.

Since most of the monies owed for the hiring of tractor services (during the operational period) must be paid to the BARIDEP to cover the farm credits given, the farms are relatively fortunate in that they are not so tied up as they might have been with private money lenders (or tractors owners) whose interest rates can wipe out any real gains obtained from the farms.

3.10. COSTS AND RETURNS OF COMMUNITY FARMS

Receipts, Expenses and Incomes of Community Farms -
Established From March 1976 to June, 1980

ITEM		V I L L A G E S	
		Baamire	Oforikrom
Receipts	Adutwie		
Sales of maize	50.00	1,170.00	-
Sales of Cassava	-	1,000.00	-
Sales of Groundnuts	70.00	-	86.00
Loans Received	350.00	-	-
TOTAL RECEIPTS	470.00	2,170.00	86.00
<u>OPERATING EXPENSES</u>			
Hiring of Tractor Services	165.00	75.00	65.00
Hired labour	22.40	15.00	10.00
Fertilizer expenses	41.00	149.00	-
Seed, Seedling etc.	391.60	330.00	152.00
Spraying chemicals	-	-	50.00
Land pacification costs	-	-	69.00
Loans Repayments	350.00	-	-
TOTAL EXPENSES	970.00	569.20	346.00
Net Returns to Community			
or	-500.00	+1600.00	-346.00
Net farm Income			
Net Cash Income	-200.00	+1770.80	-180.00

*Source: Author's Research Jan. 1982.

NOTE:

* Net Returns to community are actually net returns to the community's land, labour and management.

*Net cash income equals only cash receipts less cash expenses.

*Net cash income equals cash receipts less cash expenses during a given period. Community labour (was) not valued in the computation of net returns to the community.

Receipts Expenses and Incomes of Community Farms

B

ITEM	V I L L A G E		
	AGOSA	ASUEYI	NKWAESO
RECEIPTS			
Sales of Maize	40.00	-	870.00
Others	-	24.00	-
TOTAL RECEIPTS	40.00	24.00	870.00
Operating Expenses			
Hiring of tractor services	65.00	445.00	1430.00
Hired Labour	13.00	22.50	276.00
Fertilizer Expenses	-	-	205.00
Seeds/Seedlings etc.	267.00	24.00	860.00
Others	-	24.00	-
TOTAL EXPENSES	345.00	515.50	2771.00
Net Returns to community or net farm income	-305.00	-491.50	-1901.00
Net Cash Income	- 55.00	-491.50	-1111.00

C

RECEIPTS			
	NCHIRAA	BUOYEM	AKROFROM
Loans Received	-	-	406.00
TOTAL RECEIPTS	-	-	406.00
Operating Expenses			
Hiring of tractor services	515.00	90.00	305.00
Hired Labour	92.00	114.00	40.00
Fertilizer Expenses	470.00	42.00	-
Seeds/Seedlings	260.00	75.00	140.00
Loans Repayments	-	-	406.00
TOTAL EXPENSES	1337.00	221.00	891.00
Net Returns to Community or Net Farm Income	-1337.00	-221.00	-485.00
Net Cash Income	-1337.00	-221.00	-485.00

*Source: Author's Research Survey Jan., 1982.

The tables above A B C) indicate the receipts, expenses and incomes of the sample community farms categorized into three groups depending on the year of establishment.

The net farm incomes and net cash incomes are negative for all farms except for that in Baamire. This is not surprising since the survey was done during a major growing season and most of the possible costs of production were recorded but hardly any yields had yet been received. The 1978 major crop harvests were obviously not taken into account but they were expected to be good.

The very high net income of Baamire Community farm is the result of good management and dedication of the community.¹² No wonder it is frequently used as a show piece by the BARIDEP. Baamire initially started its first field in 1976 († See table showing establishment of farms) and kept it up with the addition of new crop fields each year whilst Oforikrom, for instance, abandoned its groundnuts farm started in 1976 because of land litigation. The first maize planted by Adutwie community failed totally in 1976.

For the 1977 farms, all of them show losses in their income statements. The highest loss is that of Nkwaeso and it is due to the fact that it has invested heavily in ploughing by tractors for all her three fields. Because of the late arrival of the tractor in 1977, Nkwaeso community decided to grow cassava instead of maize. The two other villages - Agosa and Asueyi grew maize in 1977 and Asueyi's field failed totally due to late planting and the low rains of the year. The low output of Agosa maize is partly due to the low rains.

The net incomes for the 1978 group of community farms are all negative

¹² BARIDEP - Baseline Survey, 1975.

and this is not surprising since no harvesting has been done (when the data was collected by BARIDEP).¹³ The differences in the net incomes are mainly due to differences in the use of other inputs.

The projected returns, operating expenses and incomes, are shown in the table below. Some caution must be exercised in interpreting these derived figures because of the output assumption and conservative figures used.

PROJECTED RETURNS OPERATING EXPENSES AND INCOMES
OF COMMUNITY FARMS AS AT MAJOR CROP SEASON IN
AUGUST, 1981

VILLAGE	PROJECTED GROSS RETURNS ¢	PROJECTED OPERATING EXPENSES ¢	PROJECTED NET FARM INCOME ¢	PROJECT NET CASH INCOME ¢
Adutwie	¢ 2670.00	¢ 1067.00	¢ 1603.00	¢ 1903.00
Baamire	4520.00	626.00	3894.00	4064.00
Oforikrom	446.00	376.00	70.00	150.00
Agosa	340.00	380.00	-40.00	210.00
Asueyi	1049.00	566.00	483.00	483.00
Nsuta	3530.00	3048.00	482.00	1272.00
Nchiraa	7000.00	1470.00	5530.00	5530.00
Buoyem	455.00	242.00	213.00	213.00
Tanoboase	4000.00	534.00	3466.00	3466.00
AVERAGE	2668.00	923.00	1745.00	1921.00

*Source: BARIDEP, Kintampo, Dec. 1981.

Nevertheless certain general tendencies can be observed.

All the farms have positive projected net cash incomes which are quite encouraging since many of the farms have just been established. This supports the notion of relative financial stability of the farms, pointing to their viability as a (focus) means of financing development projects. It must be noted that only maize crop expected to be harvested in August 1981 were used for this analysis. Several other growing crops, notably

¹³BARIDEP - Community Farms Report No. 10.

tractors on time and at the right time, despite the fact that the programme's planners saw the important role of tractor in the community farm project. The result of the delay in getting tractor services is poor output due to unfavourable planting time.

Moreover, the research reveals that the Ministry of Agric. failed to supply for purchasing improved seeds. Villages which wanted purchased them from private individuals or sowed the unimproved varieties. The assumption that the Ministry of Agric was the sole agent for the Ghana Seed Company and would therefore supply for purchasing improved seeds has failed to materialise. The same holds for fertilizer which is supplied from Tema by the Ghana Supply Company.

Fertilizer expenses account for about 10% of the total expenses of the community farms. Unlike the small-scale farms fertilizers application is important if output is to increase. But again the BARIDEP's ability to supply this input is not satisfactory. The input is supplied only when a village cleared land has been ploughed. The supply vehicles are the same two tractors and it results in delays. Moreover BARIDEP could not deposit enough cash with the Ministry of Agric to secure enough fertilizer for its community farms programme though the villagers promised that.

USAGE OF PURCHASED INPUTS AND SERVICES ON SAMPLE
CROP FIELDS SINCE THEIR ESTABLISHMENT

ITEM	TOTAL NO. OF CROP FIELDS INPUT WERE USED	% OF TOTAL
Fertilizers	9	53
Improved seeds	1	6
Local seeds	14	82
Tractor services	12	71
Spraying Chemicals	1	6
TOTAL NO. OF FIELDS	17	100

*Source: Author's Research Survey, Jan., 1982.

Hired labour accounts for only 5% of the total operating expenses of the community farms and it is relatively insignificant, showing that community labour is virtually used for all labour operations. This proves the assumption made when planning BARIDEP, that the various communities would offer communal labour to finance the community farm project. This is really so because villagers in such rural context are already used to offering communal labour.

The two items - improved seeds and spraying chemicals are hardly used on the community farms though they are necessary in any modern farming enterprise. The Ministry of Agriculture failed to supply them for purchasing and BARIDEP did not do so either. Extension efforts thus should be intensified at least to introduce the villages to improved seeds which have been tested and found suitable for the area. Surprisingly the Agric. Ministry has been selling improved seeds from the Ghana seed Company (Kumasi) in the district. There is also the need for co-ordination of efforts of the government departments and officials involved in the BARIDEP or seconded to it so that operating expenses are minimized and thus incomes enhanced.

3.11. A. TOOLS FOR FARMING

The main problem with labour on community farms in the study area is not its availability but rather its inefficient utilization due to lack of tools and equipment for members of the community. This leads to under-employment during working sessions. However comparing the total adult population with the average number of people present on farms (See table at p.15 and compare to list of villages with community farm in Appendix) the number is quite low in some of the villages. However, unemployment is a major factor reducing the efficiency of the community labour and this

was stressed by many (71%) of the respondents.

The problem of tools was under-rated by BARIDEP's planners. The assumption was that since the only major input (tool) the villagers could not provide a tractor would be supplied, there would be no problem with tools since most of the people are farmers and already possess some tools.

The study however indicate that there is the greatest tendency of most farmers in the villages in the District to be cautious in the use of their own tools for the community farming. This is because of the fear of increase in the depreciation of these tools and the difficulty in replacing them. The BARIDEP can help in the procurement of these simple tools - cutlasses, hoes and axes to enhance labour efficiency on the farms. Also increasing the size of the cultivated area will be easier in most cases if machines are used for the initial land clearing - stumping of trees and termite hills.

B. CAPITAL

The first major problem with capital is the unavailability (at the right time) and difficulty in getting hiring tractor services used mainly for ploughing.

COMMONEST LABOUR AND CAPITAL PROBLEMS OF THE SAMPLE OF COMMUNITY FARMS AS DECLARED BY THE MANAGEMENT COMMITTEE MEMBERS

PROBLEM	NO. OF VILLAGES EXPRESSING THIS AS A MAJOR PROBLEM	% OF TOTAL
Difficulty in getting tractor hiring services	16	100
Scarcity of tools and equipment for community farming	12	77

CONTINUATION OF TABLE BELOW

PROBLEM	NO. OF VILLAGES EXPRESSING THIS AS A MAJOR PROBLEM	% OF TOTAL
Unavailability and difficulty in getting fertilizers	9	55
Lack of finance for maintenance and expansion	7	44
Difficulty of getting chemicals for spraying	5	33
Unco-operative attitude of villagers	2	11
TOTAL NO. OF VILLAGES (Sampled)	16	

*Source: Author's Research Survey Jan. 1982.

As shown in the table above all the sampled villages stated, this as a major problem. The BARIDEP and some private tractor owners have been doing work for the community farm but still tractor services are increasingly difficult to obtain. In some cases, as have been said earlier, communities have cleared land only to abandon the efforts in establishing the farms due to lack of tractors for ploughing or they reduced the desired acreages for the same reason. Oforikrom (1978), Kwaabia (1978) Nchiraa (1976) and etc.

To effectively increase the participation among the community members there is the need to incorporate the use of tractor services for ploughing by villages which are anxious to use them; although this should not be taken as an excuse to justify the complete reliance on tractors, there is no single village among the sample where tobacco or cotton has not been cultivated at least for two years. Thus the villagers have become used to an improved technique of farming which they hardly can abandon since they know the advantages therein. The BARIDEP may have to purchase more tractors

to add to the two it already has since the communities pay for their (tractors) services. The tractors could be hired to individual farmers in the communities who would be grateful to the idea. Bullock ploughing may be an alternative but mixed farming is on a low scale. Very few bullock are reared in the District though the environmental conditions are favourable. The Mechanization Division of the Ministry of Agric could be contacted for help from Wenchi only 19 miles away from Techiman.

A suggestion often made by the community members themselves is that the government or BARIDEP or the financial institutions should help progressive community farms to obtain tractors and repayment made by instalment. This is a laudable idea because of the following advantages:

1. Communities can expand both the sizes of their community farms and individual holdings.
2. The tractor(s) can also serve as a chief means of transport in the village i.e. (a) from village to farm (b) from the village to other villages (c) from the village to BARIDEP's headquarters.

The idea would also help run the community clinics which have been set up and are to function from the proceeds of community farms.

The other major capital problem is lack of finance or credit. Out of the 16 villages mentioned all declared that BARIDEP is their chief source of credit. A very negligible number mentioned other sources. The credit was to pay tractor services, fertilizers and other farm expenses. BARIDEP thus fulfilled its obligation but the time of fulfilment in some cases was delayed. There is thus the urgent need to include (other) financial institutions - the Ghana Commercial Bank, the Co-operative Bank, the Agric Development Bank and the Subinso Rural Bank all located in the District. The BARIDEP could act as at least a guarantor. Though some problems exist, the community farms have little management problems other than the need to keep accurate and standard or conventional accounts.

EXTENT OF USE OF RECOMMENDED CROP HUSBANDRY PRACTICES ON ESTABLISHED
COMMUNITY FARMS SINCE THEIR ESTABLISHMENT

PRACTICE	NO. OF FIELD	% OF TOTAL
Fertilizer application - NPK type	9	53
Fertilizer application - Sulphate of Ammonia	3	18
Regular Weed Control	15	88
Pests Control with pesticides	1	6
Crop Rotation	0	0
Planting of Improved Varieties of crops	1	6
Spraying of crops - insecticide	-	-
Sole cropping or Pure Stand cropping	10	59
TOTAL	17	100

*Source: Author's Research Survey Jan. 1982.

The table above shows the extent of the use of some recommended husbandry practices on sample fields. The notable practices which have been adopted are regular weed control for which only 12% didn't do. Sole cropping, only 41%, application of NPK fertilizer i.e. 15:15:15. Since findings already show that the rate of absenteeism is very low or that the participation rates on the community farms are very high, one could also show how many farmers in each community have learnt the recommended practices. The average of the highest three is 67%. The BARIDEP aimed at 75% of all the full-time farmers in the villages with community farms adopting and using the innovations (practices) that may be introduced on the farms. To a great extent the objective has been achieved though no data has been collected to prove that the practices are being used (adopted) by individual farmers; since this is tied to the availability of the inputs needed by the practice. However, caution must be taken as regards the findings here. Some of the farmers in the area have grown tobacco, cotton, and

other field crops whose cultivation is similar to crops grown on the community farms. But studies at the western part of the District - Nsuta, Bowo-homodien and etc. where the farmers were not using the recommended practices on the community farms because their area is forested, confirms the data in the table above.

The main reasons why (only few) or some of the recommended practices are being used on the community farms are:

- (a) that the farmers were unaware of the practice because of lack of extension services on it by the Ministry of Agriculture.
- (b) that they lacked the necessary inputs to carry out the practices though they were aware.
- (c) that the practice looked un-economic from the point of view of the farmers.

This study considers the lack of awareness on the part of the farmers and the inadequate extension and training facilities as the major factors which account for the meagre use of these practices. Thus the Ministry of Agric with its four Technical officers who were already under-utilized before the initiation of BARIDEP, failed to do their duty. There is the need to fully incorporate their services in the future. As an alternative, farmers could be selected and given some on-the-job training at Wenchi Farm Institute just 19 miles away. The Institute has been doing this since 1963 when it was established. The Training at the Institute free, both boarding and lodging.

Marketing the produce does not constitute a significant problem in any of the sample villages as yet, since the largest market centre in the whole Ghana is located in Techiman and goods especially maize, cassava, beans and others cultivated on the community farms sell fast. But the design of BARIDEP seems to have made no provision for storage of produce. None of the sample villages had a facility for storage. This would create a serious threat to community farming if a period of prolonged bumper harvests and the

attendant low prices arise. Moreover, this problem shows up indirectly in the fact that none of the communities was or had cultivated crops which perish fast and must be sold out or stored quickly after harvests e.g. vegetables, tomatoes, okro, though they sell nowadays higher.

Poor rains however have been thwarting the efforts of villagers under community farming. Since irrigation facilities cannot be provided because of the huge capital costs involved, there is the need to seek technical advice from the local Meteorological Stations on rainfall timing. Also the Ministry of Agriculture should do well to introduce strains which can withstand some degree of drought. The Local Meteorological station has never been consulted since BARIDEP was initiated. However, the problem of inadequate rain could partially be solved by early preparation of fields and supply of inputs including tractor services; this BARIDEP or otherwise can do.

3.12. THE IMPACT OF COMMUNITY FARMS

To analyse the impact of community farms on the villages concerned the following points must be well noted.

(a) Some of the farms in the sample villages started only in 1979 and have had one or no harvest (Data collected in 1980).

(b) Villagers sell their labour to finance the farms.

Asked if they saw the community farms as an instrument for financing development projects in the future, about 48% said yes. But 57% could not answer. At Agosa, Asueyi and Nchiraa, 60% of those interviewed shared the view that the community farms could raise revenues for the development of the villages.

Out of the villages interviewed at Nkwaeso, Agosa and Asueyi where farms were started in 1977, about 60% indicated that the revenues from the farms were being used to pay the community clinic attendants and in

maintaining schools and roads. Interviewees were questioned as to the positive or negative effects of the community farms on their private farms. 68% of the total respondents (160 people) said they have never had any negative effect. Some said, even if it had the effect was not noticeable.

Acquisition of New Farming Techniques

There were problems in getting information on this factor. Most farmers replied "if we don't get the necessary inputs, how do you expect us to acquire any new techniques of farming." Actually about 50% of the respondents who answered the question said they have learned new techniques; but about 47.2% from Asueyi, Adutwie, Buoyem and Oforikrom said they had not for they were tobacco growers and knew all the techniques." The situation was different in the forested Western part of the District where tobacco was not cultivated.

ACQUISITION OF NEW TECHNIQUES OF FARMING FROM COMMUNITY FARMING

ITEM	Nkwaeso	Agosa	Baamire	Asueyi	Nchiraa	Adutwie	Tanoboase	Buoyem	Oforikrom	TOTAL	%
Not Answered	0	0	0	1	0	1	2	0	0	4	3.2
Acquired new techniques of farming	5	8	7	1	19	4	9	4	5	62	49.6
New No new techniques of farming acquired	6	10	0	18	3	3	1	4	4	59	47.2
TOTAL	11	18	7	20	22	8	12	8	9	125	100.00

*Source: Author's Research Survey June, 1982.

EFFECT OF COMMUNITY FARM ON GROUP ACTIVITY IN
SELECTED VILLAGES

ITEM	Nkwaeso	Agosa	Baamire	Asueyi	Nchiraa	Adutwie	Tanoboase	Buoyem	Oforikrom	TOTAL	%
Not Answered	1	2	0	1	1	0	3	1	2	11	8.8
Stimulated	8	16	7	10	21	7	19	5	7	100	80.8
Not Stimulated	2	0	0	9	0	1	0	3	0	14	11.2
TOTAL	11	18	7	20	22	8	22	9	9	125	100%

Source: Author's Research Survey Jan. 1982.

Stimulation of Group Activities

One advantage from the introduction of community farming is that it has greatly stimulated group activities in the villages. In the sample villages, except Tanoboase, it was clear that there seems to be a perfect understanding and unity among the villagers and between the villagers and management committee members. Consequently, the task of mobilizing the villagers for group activities is quite easy as the table above show.

The table reveals that in each village about 82% of the people interviewed said the introduction of community farms has stimulated group activities. About 80% expressed the view that the idea has strengthened the existence and functions of the village committees and brought about cohesion and group consciousness. Such views came from Agosa, Nchiraa, Tanoboase and Oforikrom.

Creation of Job Opportunities

Since the introduction of the whole project job opportunities have been created for the youth in these villages (at least a sizeable number). In each village with a community clinic, a youth has been employed to take

charge of the clinic and the community farm revenues have been used to pay the clinic attendants. If plans to obtain tractors go through then tractor operators are also going to be employed.

Other Effects

The use of tractor services has already had an impact on the mode of farming in the Techiman District. Another important point that needs to be stressed is the role of the women and youth in the affairs of their communities. The establishment of community farms has made room for the inclusion of both women and youth in the village development committee. This has indeed given the women and youth the chance of actively involving themselves in matters affecting their communities.

On the average there are about 220 adults in each sample village in the area and if each person is taxed ₦10.00 per year (on the average) then the total revenue obtained through taxation is about ₦2220.00 per village. From the projected gross net incomes (See page 30) one can realise that most farms have revenue capacities far an excess of what could be obtained through direct taxation. The implication here is that community farms, efficiently managed, can serve as a powerful and effective medium for raising revenues for development purposes.

NB* Hence, BARIDEP's Goal (See A2, B2 and C2 of Logical Framework sheet) though has not been achieved in totality could easily be achieved in future. The Average Projected Gross income is ₦2668.00 far above the ₦2000.00 required by April 1980. Even the average projected Net Cash Income is ₦1921.00. Though none of the community farms could raise an amount of ₦10,000.00 (BARIDEP'S objective for an average farm) so that projects to this tune could be financed within a year as BARIDEP sought (See C-2-Magnitude of outputs section of Logical Framework Sheet), the community farms are capable of getting this; but this is subject to BARIDEP

doing the following:

- (1) Making tractor hiring services available at the right time.
- (2) Employing more agric. extension officers or stimulating the Ministry of Agric and other related Government agencies in the District to stand on their feet and also co-ordinating their activities. This is because it is obvious that the failure to achieve the stated objectives stems not from the villagers but with BARIDEP as regards tractor services and the Ministry of Agric and other members e.g. Department of Social and Community Development failing to visit the villages regularly and also failing to offer extension services.

3.13. CONCLUSIONS

Looking at the objectively Veritable Conditions Column of the Project Design Summary - Logical framework sheet, and especially C2, only output 4 could be said to have not been attained. The data available shows that all others have been achieved. But the consolidation of the gains lies in the future and subject to improving upon the findings below if the End of Project status situation of B2-2 (Ref. to Log Sheet) is to be achieved.

1. The idea of community farming was initiated by BARIDEP even though some villages had had community farms some years back.
2. The attendance at the farms is very high with low labour absenteeism. Records of receipts, expenses and labour inputs are kept for a majority of the farms. However, community farms accounts are not separated from other village accounts.
3. Appointment of officers to serve on the Farm Management Committee is very democratic and officers discharge their duties efficiently.
4. Acquisition of land for community farming does not pose any significant problems in the sample villages. Land used has been leased freely by the chiefs.

5. Labour is no problem. The main problem is its ineffective utilization on the community farms due to lack of sufficient tools and equipment for the average of about 200 adults who work on the farms in each village.
6. The major problem with capital is the unavailability and difficulty in getting money to hire tractor services and obtain fertilizers at the right times. Inputs like seeds, fertilizers and tractor hiring services of the farms need to be supplied in adequate amounts and at right times.
7. There is an urgent need for the accredited external agencies to visit farms regularly and attend to the persistent problems of farmers. The villagers also need to be educated on the use of modern techniques of farming and farm management techniques.
8. There is total absence of mixed farming and the expansion of community farms to include livestock and poultry should be encouraged.
9. The stated objective of the programme has not been achieved in quantitative terms mostly due to the above problems. But there are positive indications of achieving it in a very short time. Therefore the programme should be allowed to run or could be replicated in a similar environment taking into consideration the points above when planning.

R E C O M M E N D A T I O N S

1. Pacing need be discouraged as a means of measuring the size of farms.
This will eliminate the confusion on size of the community farms.
2. Balance sheets of community farms may be prepared by the villages with the aid of BARIDEP or some agency e.g. the Audit Department.
3. Farm Management Committees or the villages development committees should procure implements - cutlasses, hoes and axes with the help of BARIDEP or the Ministry of Agric or some agency. These tools should be kept at a central place - the chiefs house and should be used for community farm work. The increase in the supply of tools will reduce the under-employment of community members during working sessions.
4. The need for BARIDEP or other accredited agency to help supply tractor hiring services, fertilizers and improved seeds is very important for future development and expansion of the community farms. Incessant delays in ploughing has resulted in several communities abandoning farms or reducing considerably the desired hectares.

BARIDEP (or the Extension Division of the Ministry of Agric.) should assess the input needs of the community farms before the major or minor seasons and then help them to acquire these inputs. It is very difficult to get these inputs on the market and if the (initial) interest of the communities should be sustained, it is important that they get these at the right times.

5. It is recommended that the BARIDEP assists community farms to acquire their own tractors.
6. Agric extension and training efforts which appear inadequate in the District need to be intensified to ensure more rapid diffusion of proven practices.

7. It is not sufficient for the villages to produce and sell from the community farms. They must find alternative uses to which their produce could be put. This is necessary in years of bumper harvest and very low prices. Cassava could be processed into "gari."

CHAPTER FOUR

EVALUATION OF COMMUNITY CLINIC PROGRAMME

INTRODUCTION

The Brong Ahafo Rural Integrated Development Programme (BARIDEP) has five major aims. Those that affect health (planning) are a quoted as follows:

2. To assist in the provision of health and Agric. Extension services to the rural farmers in order to increase their productivity and thereby raise their standard of living.
3. To obtain balanced distribution of Primary Health Care and other amenities. In this bid BARIDEP hopes to improve the rural community health in order to increase their productivity.
5. To encourage the rural community to undertake self-help projects which can provide social amenities such as water, health facilities, schools etc. These projects are expected to be initiated by the rural communities with the help of the BARIDEP.¹

The Community Clinic Attendants (CCAs) Training and the subsequent opening of community clinics is one of the action programmes which the BARIDEP undertook in an attempt to achieve the above-stated aims inter alia. The underlying goal of the community clinic programme is to improve the coverage (accessibility) to health service by setting up a village-based system of health (Ref. Project Design Summary at the Appendix).

The training of the first batch of community clinic attendants (CCAs) started in December, 1975 in Kitampo²; and four graduated in 1976. Ever since then, the training of CCAs has been going on. Moreover,

¹ BARIDEP - A Review of 3-yrs Experience April, 1978.

² BARIDEP - Community clinic in Nkoranza (preliminary Analysis) June, 1978.

the Holy Family Hospital, Techiman also volunteered in 1977 to help train the community clinic attendants (CCAs) and by August 10, 1981, had trained 15 CCAs. To accelerate the training of the CCAs all the Health Centres and Posts in the BARIDEP area were utilized - Nkoranza, Kintampo and Tanoso including the Holy Family Hospital, Techiman. So far (Nov. 1981) there are 48 community clinic attendants (CCAs) in the BARIDEP area. The breakdown of the number according to District Council areas is as follows (See the table 1 below).

TABLE 1

COMMUNITY CLINICS, DISTRICT COUNCIL AREAS
AND NUMBER

NAME OF DISTRICT COUNCIL	TOTAL NUMBER OF CLINICS OPENED	% OF TOTAL
Nkoranza Dist. Council Area	23	47.9
Techiman Dist. Council Area	16	33.3
Wenchi " " "	9	18.8
TOTAL	48	100.0

Source: Report on Community Clinics. C.K. Boso, Medical Asst. March, 1981, Kintampo.

However at present (March 1982) twelve CCAs had completed their course and were waiting for their clinic to be opened. Of this number, one (8.3%) came from Wenchi District, Techiman District had 2 (16.6%) and Wenchi 9 (75%). The Techiman District which is the study area for this study has a total of 16 (March 1982 - the time of research for this thesis).

The (evaluation) research for this chapter was carried out by the author and four assistants (Some 4 first and second year Social Science students of U.S.T). All the 16 villages which have community clinics were visited (See the Appendix). The verbal interview

covered various topics like personal background, training, start of work in the village, working conditions, operation of clinic, drug utilization, problems and satisfaction with job. The purpose of the (evaluative) research was:

1. To obtain information on the selection process of the CCA
2. To obtain information on the training and sponsorship of the CCA
3. To obtain CCAs opinion about the responsibility of the Village/
Town Development Committee and the Government.
4. To obtain information on the working conditions of the CCA
5. To obtain information on the running of the community clinic.
6. To obtain information on the patient load and the coverage of the clinic.
7. To obtain information on drug use.
8. To obtain the CCAs opinion on their work and their problems.
9. Finally to obtain information from the village development committees on their contribution and expected in the (a) initiation (b) running and (c) supervision of community clinics.

Methodology

In each village with a clinic the CCA, 2 members of the village development committee, one literate resident and an illiterate resident were interviewed. This gives a total of 80 respondents for villages which have clinics. But 20 people who live outside the community clinic village but come under the area of the clinic were also interviewed. In all the above situations interview guides were used. Personnel of the BARIDEP including Health Centre Superintendents who are connected with the community clinic programme as well as the Senior Medical Officer, Holy Family Hospital Techiman (in fact a Principal Nursing Officer, deputized for him) and the Principal public health nurse (Techiman District)

were also interviewed. The District Chief Executive for the District was also contacted.

In the case of the CCAs the interview were done in Twi (vernacular) during clinic hours when they were not busy. The interviews lasted 1 - 2½ hours, with ½ hour waiting time during which observations were made. Whilst two of the interviewers (one doing the discussion and one writing) a third collector copied the relevant data from the available records in the clinic. As regards the residents of the village and the members of the village Development Committee, the same vernacular was used. But of course the English Language was the rule as regards the others. This chapters is the analysis of the data collected from:

1. Community clinic attendants CCAs
2. Village Development Committee members
3. Residents of the villages with community clinics
4. Non-residents but attend community clinics
5. Qualified medical personnel connected with the community clinic programme.

The programme has been broken down using a Logical Frame (Ref. to Appendix) worked out by the author from BARIDEP records and the method of evaluating is weighing the Goal, the purpose of the project against what has been achieving while taking into account the assumptions made.

4.1. Set Up of the Community Clinic Programme

Despite the growing awareness of the importance of preventive health activities, medical care seems to be a great concern of the rural population. Preventive health activities do not readily catch the imagination of the rural people. It is therefore no surprise that during an area profile survey (by the BARIDEP in July, 1975)⁴, most of the villages in the programme area (including the study area) wanted health posts or clinics or visits from mobile clinics more than anything else. They were more concerned about curing their present ailments now than taking

measures to prevent them.

The concern of the rural communities about facilities for treating their diseases seems justified because of the inadequate coverage of the District with medical care. By the time of the initiation of the community clinic programme there was (and there is) only one hospital and a small Ahmadiyya hospital all located in Techiman the District capital. The District also had only one (public) Health Centre at Tanoso, one private clinic (Asuo Yeboah) and a public health clinic (also in Techiman). There were only 2 doctors, 68 nurses of all categories and 11 para-medical staff in the District which had a total population of 53,127 (1970).

In fact the situation has not changed; only one private clinic cum Maternity home (Arms Maternity Home and clinic) has been set up. Moreover most of the mentioned health facilities are still located in Techiman, leaving the bulk of the District uncovered.

To deal with the situation mobile clinics were being run by the Medical Field Units (MFU) and sometimes by the Holy Family Hospital. The public Health Department (clinic) still does this but on a low frequency. The mobile clinics have been hampered by the frequent breakdown of vehicles, the bad condition of roads, especially during the rainy season and the shortage of health staff. This makes the visits to the villages not as regular as one would wish. Also since a mobile clinic visit to any particular village also attempts to include the people from the surrounding villages, the irregularity of the visits affects the attendance greatly. Thus it became clear after BARIDEP's Baseline Survey that either more health posts should be put up or some other form of medical care services should be devised.

By BARIDEP taking the first alternative would mean waiting a long period to have the structures put up. Secondly staffing becomes a

⁴BARIDEP - Baseline Survey Part II Aug., 1977.

problem since this will have to be fitted into the national manpower training scheme. In short that alternative would take time to establish and will mean more money should be used.

The other alternative was to set up some form of clinic which would cater for the treatment of the common minor ailments prevalent in rural Ghana. For the reasons below the BARIDEP chose the second alternative. The programme is trying to respond to the needs of the rural communities; for they have made it clear that they wanted health posts, but for financial and manpower reasons such requests/need could not be readily met. The Community Clinic programme was thus developed to satisfy the community wishes and also BARIDEP's aim to involve the communities in the area in solving their own (local health and other) problems.

4.2. DEVELOPMENT OF COMMUNITY CLINICS

The (former) Department of Social Welfare and Community Development has been instrumental in introducing the BARIDEP approach through an adult education campaign. In its campaign the Department made it clear to the villagers that the Ministry of Health was ready to train someone from the village to be able to treat the common but minor ailments within their village and that this would prevent their travelling long distances to reach the health institutions. That is, they lose a lesser number of hours on their farm work and spend lesser amount of money to get treatment. The conditions for setting up the clinics and the responsibilities of the community were clearly spelt out as follows:

1. The population of the village/community should be large i.e. not less than 500 people.
2. The community should be 'far' from existing health institutions
3. The community itself would do the selection of a suitable candidate for training on the basis of their own criteria.

4. The Town/Village Development Committee would take responsibility for providing the community clinic attendant (CCA) with a suitable accommodation and for the clinic with furniture; at least 1 table, 2 chairs, shelves and a cupboard, 4 benches and a barrel.
5. The Town/Village Development Committee would make an arrangement with the CCA and decide his training, working hours, fee for services, salary and payment of other recurrent costs e.g. costs for drug collection, transportation, nightwatchman (if CCA is not sleeping in the clinic, stationery etc.
6. After his training and assumption of office, the Town/Village Development Committee would oversee the work of the CCA, receive the fees for services and check the accounts and the drugs provided.

The Department of Social Welfare also told the villagers that the Ministry of Health would provide:

1. Free training of the selected candidates. This training would be free no matter the duration a candidate spends on the course.
2. A supply of approved drugs and necessary clinical equipment free of charge.
3. Technical supervision of the CCA bi-monthly.

Asked how the idea of setting up the clinic reached the village all the 80 respondents said through the Department of Social Welfare and Community Development which held meetings and discussions with them. All (100%) of the respondents also said that they agreed and liked the conditions laid down by the BARIDEP. When questioned further about their view points on the conditions to be fulfilled when setting up the clinic, 73% of the respondents reported that initially they felt the conditions were realistic, 21% said they were too demanding and 6% said they don't know. Of the respondents who said the responsibilities on them were too

demanding, 81% remarked that the people were already too poor to provide money to train the CCA and to set up the clinic. They suggested that the District Council or Government should absorb all the costs.

However, the respondents reported when their attention was drawn to the scheme whereby they would have to make community farms the proceeds from which could be used to finance the community clinics they all said that the idea was good and could be tried in any similar environments. When asked to give any suggestions if the procedure of contacting people to set up community farms should be modified, 67% of the respondents opted for the Ministry of Health overseeing/supervising the work of the CCA, receiving the fees for the services and checkings accounts and the drugs provided. Their prime reason was that the Town/Village Development Committees have not been able to take up this duty because they lack the requisite training to supervise a kinsman who has been 'skilled' by the Ministry of Health to work for them. Most of them remark "how can we supervise a doctor?". 20% of the respondents also said the BARIDEP should be active and present with the people during the selection of the CCA, especially in screening them. This is because they remarked, "some CCAs become "untoughables" soon after returning from their training." The rest 13% or 10 respondents said the BARIDEP and the Department of Social Welfare should contact the Government for building materials so that they build community clinics since accommodation for the clinics and for the CCA pose problems since they must be "decent" and there are serious housing problems in all the villages.

4.3. Selection of the CCA

The way the selection process of the candidates has been carried out has proven to be a good predictor for the acceptance of the community clinic programme. Three major selection procedures of the candidates can be distinguished. First is the situation where the choice is ini-

tiated, fully discussed by the community itself. The second way is by which the Village Development Committee makes the selection and recommends the candidate to the community. Depending on the "unity" of the community and power of the Village Development Committee, this choice can be fully discussed or can be accepted without discussion (VDC) selects and appoints directly without approval of the community. In a few cases a village chief - 'odikro' had tried to appoint his own candidate (relative) only to find out that the community disapproved so that he had to withdraw his candidate. Table 2 below shows the CCAs selection process.

TABLE 2
SELECTION OF CCAs IN 16 VILLAGES IN TECHIMAN DISTRICT

SELECTION PROCEDURE	NO. OF CCAs	% OF TOTAL
Selected and Appointed by Village Dev. Committee directly	5	31.3
Selected and chosen by Village Vote directly	2	12.5
Selected by Village Dev. Committee and Approved by Village	8	50.0
Selected through written exam.	1	6.3
TOTAL	16	100.0

*Source: Author's Research Survey, May, 1982.

Table 2 (above) shows that most of the CCAs were selected by the Village Development Committees and approved by the village. Findings show that the criteria of selection was: good behaviour, p respect for elders and diligence. Though there was no age barrier, people more than 35 years were considered having too many responsibilities directly or indirectly. People below 27 years were also considered to "have not seen life before." and thus disqualified.

The selection procedure of most of the village Development Committees (71%) was simply inviting one or two candidates after prevetting them, telling them about the community clinic programme and asking them to pass their comments. In most cases the first would-be candidate to be invited willingly accepts the offer since he was told the criteria of selection. However about 19% of the Village Development Committee (VDC) had to take the second man to be invited because the first said he was busy and would not have time. 10% of the VDCs too had to re-select candidates because all people of the first batch rejected the offer (outright). Such was the case at Krobo, Tuobodom and Akrofrom (See list of settlements with community clinic at the Appendix). N/B. These are some of the big settlements in the District. In all cases where candidates were selected, the communities endorsed the nominees by the VDCs without criticisms. This showed that the people had confidence in their VDCs.

However, a sizeable number, 5 (or 31%) of the CCAs were selected and appointed by the VDCs directly. This was the situation in the smaller villages where inter-personal relations still seemed strong. This happened at Meridian where the VDC had dwindled to only two members and the Odikro, chief was being destooled.

At Nchiraa, the selection was by written exam. Research showed that many "quack-doctors" serving the people saw the CCA training as a golden chance of improving their skills and a license to purchase "poisonous" drugs which hitherto they could not. Seven candidates vied for the post after much lobbying in the four quarters of the town; thinking the selection was going to be by election. The examination was conducted by the Health Centre Superintendent of Subinso on the request of the Town Development Committee.

TABLE 3
TRAINING COSTS OF CCAs (Excluding
 Tuition by Min. of Health which was free)

Sponsorship	No. of CCAs	% of Total
By community (or village Dev. Committee	11	68.8
By Relative	2	12.5
By Community (or VDC) Relative/Self	2	12.5
Paid Training Cost self (him/her)	1	6.5
TOTAL	16	100.00

Source: Author's Research Survey, May 1982.

From the analysis and data from Table 2, the basic assumptions made by the BARIDEP before the CCA training programme (Ref. Logical Framework at A4 of Appendix) have all been proved correct/valid. These were:

- a) that many youth would volunteer to train as CCAs; and truly all the CCAs (90%) said they volunteered.
- b) that all communities would be able to select a suitable candidate by their own criteria; and this they have done with alacrity.

Table 3 (above) reveals that most CCAs were supported by the VDCs, Village Development Committees. However, when interviewed further many CCAs said they were receiving between $\text{¢}50\text{--}\text{¢}100$ a week during training. This was inadequate because it was for both boarding and lodging. Moreover, 4 communities (25% of total) ceased to pay the training allowances of the CCAs whilst on training. These communities are Akrofrom, Tuobodom, Nchiraa and Mesidan. A few prosperous members of the V.D.C. and in the case of Tuobodom, a husband paid those expenses from their own pockets voluntarily. When contacted the 'defaulted' VDCs said they were out of funds. They also said though they had made community

farms when the CCA was on course harvest was not due. But this was found incorrect when the information was checked against the date of establishment of community farms in the mentioned villages.

Findings also show that the total training costs were not the same for all CCAs. Most of the communities whose clinics are now functioning (See Appendix) paid more including making farms for the CCAs while away on training. This effort is highly commendable.

TABLE 4

RELATION OF CCA TO THE VDC CHIEF OR OTHER INFLUENTIAL
PEOPLE IN THE COMMUNITY

KIND OF RELATIONSHIP	NO. OF CCAs	% OF TOTAL
Related to member of VDC	7	43.8
Self member of VDC	1	6.3
Not Related to any influential	8	50.0
TOTAL	16	100.0%

*Source: Author's Research Survey May 1982.

Table 4 shows that several candidates (44%) mentioned spontaneously being related to the chiefs family or a member of the Village Development Committee - VDC. This relationship seems to have been instrumental in their selection since most VDCs saw CCA training as a "Medical Course" after which one could go to the hospital and work as a nurse or that one could open his own clinic and make money. Thus most VDCs didn't want to throw away the opportunity. In 10 out of 16 (62.5%) choices approved by the community (See Table 2) the CCA was related to a member of the VDC or another influential member in the community.

Experiences elsewhere (e.g. the Danfa Project) and in the BARIDEP up to date suggest that the direct role of members of the VDC in the choice or selection of a candidate and the relationship of the candidate by and less commitment on the part of the community as a whole.

Belonging to the village is a more important criteria for acceptance by the community as the following remark illustrates: "I was in training when I was introduced to the whole community but they said as I was not a member or native of their village, they cannot look after me; so if the Chairman can do it he must do it (This CCA was appointed by the Chairman of the VDC. He was withdrawn because he was not a native and not related to any of the members of VDC. This happened at Manso).

4.4. Training of the Community Clinic Attendants

As Table 3 shows (See p.106) in most (71%) communities public money was spent to sponsor the CCAs in training. The money spent varied from village to village from \$50-\$100 a week during the training period. The candidates had to look for their own accommodation (near the training centre) for all the 8-12 weeks of their training.

As a rule 1-2 hours of theory were given daily followed by practicals under the supervision of Health Centre Superintendents in the (a) OPD - Out-Patients Department (b) Dispensary (c) Dressing Room and (d) Consulting room. The (CCA) trainees were kept daily rotating between those places. In general, theory instruction took place in the morning before the start of the OPD or late in the afternoon after the OPD.

The above was the case of BARIDEP's own training at Kintampo Health Centre but at the Holy Family Hospital, Techiman, the course was less intensive. The CCAs spent about 5 months in the hospital and had 3 blocks of field experience. They spent one week in the Public Health

Department - Techiman; one week in the Public Health Department - Techiman; one week with environmental sanitation and one week with the Medical Field Units - MFU. The trainees also spent a two-week period in their own communities during which they conduct community and nutritional surveys, met with officers from various departments with whom they would be working and educate some of their villagers. The CCA trainees were also assisted and supervised in conducting a simple nutrition clinic.

As of now, the Holy Family Hospital is not able to do regular on-the-site supervision of the CCAs she has trained but provision has been made for them to come to the hospital bi-monthly for further education and sharing of experience. Seminars focusing on special subjects and demonstrations are also given. An open forum is granted for individual CCA problems (not financial anyway). Finally, the Holy Family Hospital CCAs must submit monthly reports to the hospital.

In the case of the Public Health Department/clinic - Techiman, the trainees are first given 2 hours theory once a week in the afternoon and afterwards daily for 3 months. This is followed by a practical training for 5 months. The training period varies from 7-11 months for each trainee depending on his/her judged ability to work independently and the completion of preparation by his community to start the clinic. The training here like that of Holy Family Hospital is non-residential and spread over many weeks.

The training at Kintampo is short but the trainees are sent for practical training at the various health centres and posts in the region. This practical training varies from 4-6 months. Table 5 (below) shows the impression of the CCAs interviewed in the study area - Techiman District.

From the table, it is clear that 7 out of the 11 CCAs at post

(i.e. 58%) were satisfied with the duration of their training. Only one (13%) one CCA responded that the training was too long. He later explained that he experienced a lot of financial problems.

TABLE 5
IMPRESSIONS OF 11 CCAs IN TECHIMAN DISTRICT ON
THE DURATION OF THEIR COURSE

ITEM	NO. OF CCAs	% OF TOTAL
Training Period too long	1	12
Training period too short	3	30
Training period is alright	7	58
TOTAL	11	100

Source: Author's Survey May 1982.

Of the group who said the training was too short and therefore would have wanted to stay longer at training (i.e. 3CCAs), two or (66%) said they wanted to learn suturing, injection and basic midwifery in addition.

All the 11 respondents interviewed said they learnt and they now know:

1. How to diagnose common diseases.
2. How to write a medical history report and referral notes
3. How to dress sores and wounds
4. Identification and dispensing of drugs and
5. Nutrition (of especially children).

Asked of what should have been taught at the training which was not taught, the following answers were obtained.

TABLE 6

VIEWS OF 11 CCAs ON WHAT SHOULD HAVE BEEN
TAUGHT DURING THE CCA TRAINING - TECHIMAN
DISTRICT

ITEM	NO. OF CCAs OUT OF THE 11	% OF TOTAL
Suturing	10	90
Basic Midwifery	7	60
Injection	11	100
Any others	2	20

Source: Author's Survey May, 1981

NB % over 11 CCAs not 30CCAs

It is quite clear that most CCAs so far trained for the Techiman District wanted suturing, injection and basic midwifery to be added to their training and in subsequent sessions. Their view is underlain by the fact that they have been writing referral notes on the three items especially suturing of wounds from farm tools. Injections are also needed when a snake bites or an insect stings people, a common occurrence in the villages. Moreover, the CCAs are approached whenever there is a prolonged labour or some complication with labour.

4.5. Assessment of Performance of CCAs

The author requested 3 "judges" - the Principal Nursery Officer of the Holy Family Hospital, the Principal Nursing Officer of the Public Health Department/Clinic and one other trainer from BARIDEP to conduct some assessment to find the level of performance of the 11 CCAs during their routine visit (also requested). Tables 7 and 8 below are the summaries of their assessments.

TABLE 7

ASSESSMENT OF PERFORMANCE OF 11 CCAs BY 3
JUDGES - TECHIMAN DISTRICT

Item	No. of Villages		
	Poor (=0)	Reasonable(=1)	Ex'cellent = 2
1. Drug storage and handling	0	8	4
2. Drug labelling & Readability	0	7	4
3. Cleanliness of medical equip.	4	6	1
4. Storage of bandages, gauze equip.	2	8	1
5. Water Storage & treatment	3	5	3
6. Waste Disposal	8	2	1
7. Cleanliness of treatment room	2	8	1
8. Availability and use of records & forms	1	8	2
9. Accuracy of up to date record keeping	3	5	3
10. Perceived attitude towards the job	1	8	2

TABLE

INDIVIDUAL OVERALL SCORE FOR THE 11 CCAs (of Table 7)

PERFORMANCE	NO. OF CCAs	% OF TOTAL
Poor (0-6) Performance	2	18.2
Reasonable (7-13) Performance	8	72.8
Excellent (14-20) Performance	1	9.1
TOTAL	11	100

Note: The majority opinions on the score for each performance criteria by the three judges has been used to derive an individual total score for the CCAs.

Table 7 shows that the poorest scores were given for proper waste disposal as hardly any dustbins are available or protected against flies. The cleanliness of the equipment stored was also often judged as poor. Drug labelling and readability of prescription was most often scored as excellent.

Some of the CCAs (45.5%) have and keep records and forms. Moreover the CCAs have or seem to have a correct perception of their job and treat patients kindly. Two (18%) were by good and eight about 73% as reasonable. Only one person was found to be lacking here. Drawing conclusion from Table 8 (above) one could say that the CCAs are all doing well; since 72.8% (8 out of 11) of them were judged reasonable by the panel of judges who have worked for at least 15 years each.

Evidence of the remarkable performance of the CCAs in the Techiman District is shown by the following extract from an interview with Sister Mary Ann - Principal Nursing Officer of the Techiman Holy Family Hospital who has worked 18 years in the district.

- a) They are able to offer basic curative services for simple common illness. Some are also able to provide preventive care by doing monthly nutrition - weight surveillance clinics for under fives; others do well on follow-ups on Tuberculosis patients giving them daily streptomycin injections thus saving them a daily trip to hospital.
- b) ...In some areas the general health of children has improved due to the under 5 nutrition clinics (Oforikrom) with health education using locally available foods only....there is no documented proof about any other health improvements but it seems that people are able to get health care closer at home Some of the clinics are doing well, others not so well. All would do better if they have more support and supervision.⁵

The table below (9) shows the responses on the performances of the CAAs in the District. One hundred people were interviewed in all on this issue - 5 people from each of the 16 villages who have clinics

⁵Primary Health Care Report - Holy Family Hospital, Techiman (unpublished) August 10, 1981 pp.2.

TABLE 9
ASSESSMENT OF THE WORK OF CCAs BY RESIDENTS AND
NON-RESIDENTS WHO ATTEND COMMUNITY CLINICS FOR
VILLAGE

ITEM	NO. OF PEOPLE	% OF TOTAL
CCA knows his job very well and needs no further training	28	28.0
CCA knows his job but needs some further training	61	61.0
CCA does not know his job, should go for further training	10	10.0
CCA does not know his job, should be sacked	1	1.0
TOTAL	100	100.0

Source: Author's Research Survey May - June, 1982.

Evidence from Table 9 shows that most people interviewed are satisfied about the work of the CCAs but they wanted their being re-trained at probabably refresher courses or otherwise to broaden their knowledge and scope of work. This seems to confirm or support the reason why most CCAs wanted to learn how to inject, suturing and some midwifery.

Evaluation (Ref. To Magnitude of Output - C-2 of Logical Framework)

Using the means of verification of output i.e. C-3 of the Logical Framework all the data above was obtained. The research was done between December 1981 - February, 1982, suiting the date line set by BARIDEP. It could be said that BARIDEP has achieved most of its aims remarkably. What seems lacking is:

- i. that all communities with clinics have safe or hygienic places to dispose waste;
- ii. that all communities with clinics have hygienic or safe latrines or places to dispose night soil.

However the data and analysis, hold only for 16 villages in the District (Techiman) who have community clinics. The total population in these villages is about 25,379 or 47.7% of the total district population. What about the rest of the population? Also are the people paying more or less for health? These and similar questions are tackled below.

4.6. Start of Community Clinic

Appendix 2 shows the variation in time it took the Village Development Committees (VDCs) to make adequate preparations to enable the CAAs to their running the clinics, though the CCAs for the District came from all the three batches of CCA's trained. Most frequently mentioned were delays in buying the necessary materials and equipment to finish the building/room. In 5 cases (45.5%) delay of 1-2 months was reported due to the fact that the VDC was waiting for the inauguration date to be set up by the Department of Social Welfare. In one case, the cashier of VDC - himself a chemical shop owners, was not interested and delayed a the buying of materials claiming no availability in the market. But the rest (36.4%) were opened not long after the CCA graduated.

Before their official opening, the Ministry of Health supplied the community clinics with the following:

- | | |
|---------------------|--|
| a) Scissors - 1 | g) Sterilizer - 1* |
| b) Kidney Bowls - 2 | h) Measuring Glasses - 1 |
| c) Round Bowls - 2 | i) Towel - 1 |
| d) Thermometer - 4 | |
| e) Pincet - 1 | *Not supplied to all community clinics |
| f) Forcep - 2 | |

The sign boards/posts of the clinics were supplied by the Department of Social Welfare and Community Development varying in costs up to ₦54.00. Record forms were also supplied if not arranged for by the VDCs them-

selves. The following items were all purchased by the people (communities) themselves: tables, chairs, cupboard benches, drum (with or without tap), towel, curtain for doors and windows, and coal pot or kerosine stove. Notebooks for recording purposes were also bought.

All the community clinics visited had at least 6 out of the 8 equipment (75%) supplied by the Ministry of Health (BARIDEP). All the equipment were being used according to the CCAs. The community clinics in the large settlements (See list of settlements with community clinics) e.g. Tuobodom, requested for more equipment as there is more than one CCA and the equipments were supplied disregarding the size of population. But an examination of the materials purchased by the VDCs showed that only half of what was required had been bought.

TABLE 10

TYPE OF BUILDING HOUSING COMMUNITY CLINICS IN 16
VILLAGES IN TECHIMAN DISTRICT

TYPE OF BUILDING	NO. OF COMMUNITY CLINICS	% OF TOTAL
An old village shops donated free	4	25.0
An old shed (abandoned) donated free but lying idle	7	43.75
Old clinic built by people with external assistance but lying idle	2	12.50
Old Post Office, Police Post etc.	1	6.25
A room in the chief's house donated freely	0	0.00
A sleeping room now being hired	2	12.50
TOTAL	16	100.00

*Source: Author's Research Survey May-June, 1982.

All the clinics in Techiman District were properly housed. Most of them (44%) were old sheds - cocoa, maize etc. which were being used by purchasing agencies. A sizeable number (4 or 25%) were also old village

shops which are not being used. Both categories were donated free of charge by their owners. In the large settlements eg. Tuobodom, Nchiraa sleeping rooms were hired because no free room could be obtained. But in Aworowa and Manso, the clinics were housed in old clinics built by the people with external assistance. These clinics have been lying idle since 1962 when they were built. Oforikram too has a large clinic built in 1969 but has not been commissioned.

About 70% of the clinics were housed in single rooms which measures about 9ft by 10ft on the average. They have 2 windows and a large door which opens to both sides. The rooms are not ceiled but the floors are all cemented. However, 91% or 10 of the CCAs complained about the size of the rooms. They wanted preferably a chamber and hall type of room, so that the posterior serves as the store and CCA living room, while the anterior serves as the clinic. Most of the CCAs do not sleep at the clinics and they are usually waken up in the night to attend to a patient and thus must walk to the clinic. Also during the day when few patients come, they retire to their houses only to be called a few minutes later to work.

Regarding the 2 clinics (12.5% of total) housed in rented rooms, all were housed in rooms which may be considered as farst class in the village setting which attract 'high' rents from teachers, purchasing clerks and the few government officials who live here. All the clinics were nicely white-washed and had a big signboard displayed at the eave of the roof or on a post before the clinic.

Evaluation: The BARIDEP's assumption (Ref. to A-4 of Logical Framework at the Appendix) that all the infrastructure needed for the community clinic are within the capabilities of (the) villages in the programme area are realistic and recommendable. About 71% of the 11 CCAs interviewed complained of having no decent accommodation since they returned

from training. They are still sleeping in the rooms they were using which they share in most cases with others. And their work draws many visitors, some of which come for advice into these rooms. There is the urgent need to do something about this at least to raise the image of the CCAs and to boost their morale.

Raising Funds to (Start(Set up the Clinic

More than 80% of the respondents interviewed mentioned Fund Raising Harvests as the main source of funds for starting the community clinic. Communal selling of labour on private farms constituted 10% and the rest from levies, head taxes, and gifts from benevolent people. The Techiman District Council has so far not helped in anyway, directly or indirectly. Table 11 gives some idea about the amount realised from Fund Raising Harvests.

TABLE 11
AMOUNT REALISED AT FUND RAISING HARVESTS IN
16 VILLAGES

AMOUNT	NO. OF VILLAGES	% OF TOTAL
Less than ₦500.00	1	6.25
₦501 - ₦1000.00	2	12.50
₦1000 or more	13	81.25
Not ascertained	0	0
	16	100.00

Source: Author's Research Survey, May-June, 1982.

On the average about ₦1050.00 was collected by each village. The largest sums were collected at Mesidan (₦2500) and Buoyem (1632.00). The average could just purchase the basic items needed or leave the small debit to be cleared. However, communities which failed to get ₦1000

faced trouble with getting extra funds to start the clinic. This money was obtained through taxation, communal (selling of) labour and etc.

4.7. Responsibilities of the VDC and the Government
(the BARIDEP and the Ministry of Health)

As has been summarized earlier, the government (the A BARIDEP and the Ministry of Health) and the villages Development Committees - VDCs have specific responsibilities (Ref. to pages 5 and 6). These responsibilities were again stressed during the briefing session just after the opening of each clinic. The CCAs were asked those responsibilities and their responses are tabulated below.

TABLE 11

COMMUNITY AND GOVERNMENT RESPONSIBILITIES TOWARDS THE CCA AND
HIS CLINIC IN 11 VILLAGES IN TECHIMAN DISTRICT

Community Responsibilities	Spontaneous	After Probing	
		YES	NO
1. Payment of training costs	1	8	1
2. Supervision of Works & Treatment of patients	3	6	2
3. Check on drug supplies Purchases Transport Cost	5	5	1
4. Disciplining of CCA	2	8	1
5. Regular payment of salary and needs of clinic	7	3	1
6. Collecting/Checking fees	2	9	-
7. Payment of rent (clinic)	0	6	5
8. Supply and maintenance of Furniture	4	5	2
9. Supply of Stationery	3	7	1
10. Maintenance of building housing the clinic	4	-	-
11. Sweeping/Weeding of clinic compound	3	-	-
12. Supply of Water	2	-	-
13. Checking proper behaviour of patients	2	-	-
14. Working on the farm of CCA	2	-	-
15. Arranging transport to bring drug supplies	1	-	-

Government Responsibilities	Spontaneous	After Probing	
	Yes	Yes	No
1. Technical supervision & checking	3	6	2
2. Future Technical training	9	7	3
3. Regular drug supply	2	1	-
4. Training for giving injections	2	-	-
5. Improvement of functioning of clinics	-	-	-

Source: Author's Research Survey May-July, 1982.

The responsibilities of the VDCs dealing directly with the CCAs own situation i.e. his salary, is most frequently mentioned spontaneously. A sizeable minority (45.5%) wants more involvement of the VDC in checking of drugs collected or drugs purchased if no drugs are available through the Ministry of Health. A third major interest expected from the VDC is the maintenance and improvement of the buildings housing the clinics and the provision of adequate furniture.

To a question on whether they would like to go for further training all the CCAs responded in the affirmative. But they said they would only if their communities would give them financial guarantees. All of them also agreed to the fact that the VDC could discipline them. They also requested for the active involvement of the members of the VDC in taking inventory of drugs received as well as recording the total fees collected after work in a day.

Looking at the data of the spontaneously mentioned community (VDC) responsibilities, supported by other responses, two observations can be made.

Not all CCAs in the study area are as yet fully aware of the role and responsibilities of the VDCs or specifically they don't know what

the responsibilities of the VDCs should be for the effective functioning of the community clinics. A similar observation can be made for the government's responsibilities. Except for drug supply, only a few CCAs are aware of the role of the government (BARIDEP) in technical supervision. Surprisingly most of the CCAs don't know that it is the government (Ministry of Health) which is responsible for refresher courses or further technical training.

Although the CCAs in general (91%) do believe in cooperation and government involvement in a successful functioning of the community clinics, there is still an underlying uncertainty about the government's (BARIDEP or Ministry of Health's or both's) intentions. Most of them believe that if an external agency (government) wants to do something for rural communities, "the people are firstly put to test; and when found out that they can carry on the project, then the government does it itself." This erroneous impression about the community clinic programme seems to have arisen from the fact that it is always the people in the District who built their own schools before being taken over by the Government.

Moreover, the answers of the CCAs point to the fact that the role of Government (the BARIDEP and Ministry of Health) - although positively judged is more perceived in terms of initiating ideas and persuading people to follow up, than in terms of stimulating the community through community involvement to work for their own development.

4.7. The Community Clinic Attendant - CCA in His Work Situation

4.7.1. Personal Characteristics of the CCAs

With the exception of one (at Manso loaned from Agosa) all the CCAs in the Techiman District are indigenous (village) people. They are also Brongs (Bonos) who are well known to the villagers. They are all literate with a minimum of 10 years education (primary and

middle school). Three of the 11 CCAs (27.3%) have had additional education like some years in secondary school or professional courses. Although the modal age group is 20-24 years 58% of the CCAs are 25 years or older. (In fact 35% of them are more than 30 years). Nearly two thirds (65%) of the CCAs are married with an average number of two children. None of the CCAs has ever been divorced and they are people with much reputation in the villages whose life styles are described as good or exemplary. Besides the financial commitments to their wife and children, nine (82%) of the 11 CCAs have responsibilities of providing directly or indirectly financial assistance to their parents, or a (near) relative. All (100%) of the 11 CCAs are farmers and do have their own farms. Only 4 (36%) of the CCAs have had some limited additional occupational experiences.

4.7.2. Working Conditions of the CCAs

The working days and hours were scheduled and agreed upon by a consensus between the VDCs and CCAs. More than half (59%) of the CCAs work full time. In one case (Tanoboase) the community decided later to change the work schedule from part-time to full-time and consequently increased the salary of the CCAs.

Part time work is the situation where clinic attendance is in the morning for a few hours e.g. 6.30 a.m. - 8.30 a.m. and in the evening from 4.30 p.m. - 6 p.m. One village (Krobo) employs her CCA full time for 3 days and gives the other days free. Two villages (Agosa and Manso) have arranged for both full and part-time services on specific working days.

In general all CCAs are free on Sundays but are considered to be on call duty. The CCAs do not make any special house calls although they visit a patient in his house after he/she has been referred by the CCA hospital or by the Holy Family Hospital, Techiman to the CCA. In

case they are called to a house, most CCAs rather go to invite the patient to the clinic for treatment. It must be stressed that most CCAs (8 out of 11) 72.3% get night calls and there are many instances when they have to accompany a patient to the hospital in the night (especially when women are in labour). The table below summarizes the work schedule of the 11 CCAs in the Techiman District interviewed.

TABLE 12

WORKING HOURS OF 11 CCAs IN TECHIMAN DISTRICT

WORKING HOURS	NO. OF VILLAGES	% OF TOTAL
6 a.m. - 12 a.m. only (part time)	3	27.3
6 a.m. - 6 p.m. (whole day, full time)	5	45.5
6 a.m. - 12 a.m. and 2 p.m.-6 p.m. (full time with break)	2	18.2
6 a.m. - 6 p.m. (Full time on different day of the week)	11	100

Source: Author's Research Survey May-June, 1982.

Most (90.9%) VDCs promised their CCAs rewards in kind to supplement their cash income but about 64% of the villages have not kept their promises as is evident from Table 13 (below). None of the 11 CCAs reported that the community has actually made a (full) new farm for him except in one case (Asueyi) where the community (VDC) made some land available and helped the CCA with the work on it. This situation had put the CCAs in severe hardships leading to vacation of posts. The CCAs of Akrofrom, Mangoase, Krobi, Nchiraa and Mesidan had all vacated their posts and left the villages (probably for Agege - Nigeria). When the relatives (wives) of these CCAs were contacted, all of them confirmed that the failure of the community (VDC) to pay the salaries of their husbands regularly and/or to make a farm for them made them leave.

TABLE 13PAYMENT IN KIND OF 11 CCAs IN TECHIMAN DISTRICT

TYPE OF PAYMENT IN KIND	NO. OF VILLAGES	% OF TOTAL
No promise made for extra income	1	9.1
Promise to work on farm honoured	3	27.3
Promise to work on farm not kept	4	36.4
Promise to make farm not kept	3	27.3
Offer to work on CCA farm refused	0	0.0
TOTAL	11	100.0

Source: Author's Research Survey May, 1982.

Table 14 shows the salary and work schedule of 11 villages whose clinics are operating in the study area (Techiman District), at present (May 1982).

TABLE 14SALARY AND WORK SCHEDULE OF 11 CCAs IN TECHIMAN DISTRICT
MARCH, 1982

SALARY IN ¢	PAYMENT		WORK SCHEDULE			
¢	Regular	Irreg.	Part Time	F.Time	No.of villages	% of Total
0 - 60	0	1	1	0	1	9.1
61 - 120	2	0	1	1	2	18.2
121 - 180	4	0	1	3	4	36.4
181 - 240	0	2	0	2	2	18.2
240 or More	0	2	0	2	2	19.2
TOTAL	6	5	3	8	11	100.01

Source: Author's Research Survey May-June, 1982.

About 82% of the CCAs (9 out of 11) earn less than ¢240 a month, an amount even less than the official take-home pay of a labourer at present. This makes the requests of 10 of them (91%) for higher salary understandable. Moreover only about 54% (6 of them) are paid regularly. Even with those who are paid regularly (every month) the pay is very low between ¢120 - ¢180. (A labourer earning ¢12 a day needs to work for

only 10-15 days to earn this amount, the CCAs remarked"). Of course it is the CCAs who earn low salaries and are paid irregularly who are pressing for more pay, or have vacated their posts. They are justified because boys/men of their age in the district are able to crop at least 10 bags of maize in 5 months. A bag of maize now (May 1982) sells at ₵400 at the control price, yielding ₵4,000.00. Taking it that that is all they can get in a year, they get ₵330 a month which is by a far larger than the salaries of most of the CCAs. Usually apart from the maize there are other cover crops together with the maize which go to increase the ₵330 per month. They have no night duties and they are free at the weekends. The plight of the CCAs regarding the salaries of the CCAs need an urgent attention. Probing questions have shown that 3 of the 5 CCAs who have vacated their posts are now practising as "doctors" in the rural areas of Western Brong Ahafo and in the Sefwi Wiawso District of Western Region all along the Ghana Ivory Coast border where health facilities are non-existent or minimal.

TABLE 15
SOURCES OF FUNDS TO PAY THE 11 CCAs IN TECHIMAN
DISTRICT

SOURCES	NO. OF VILLAGES	% OF TOTAL
Proceeds from community farms only	0	0.0
Proceeds from community farm and profits from community clinic	3	27.3
Profits from running community clinic only	8	72.7
Other sources	0	0.0
TOTAL	11	100.0

Profits mean Total fees from patients less total transport and all other costs including the costs of drugs purchased not from the Ministry of Health.

*NB. Of the 11 functioning clinics in the study area 8 (or 72.7%) are running on the profits the clinics make at the end of each month.

This partly defeats the aim of the BARIDEP. The clinics were to run from the proceeds of community farm fees were to be charged where the community found a need for it. It was not meant to be the main source of funds to run the community clinics. It could be said that minimal fees were to be charged to check unwanton falling of sick by people.

Thus the CCAs charge fees that are a little higher than the treatment they give in order to make some profit at the end of the month. Part of the fees charged are used to purchase more drugs from private Pharmacies or drug sellers in Techiman or elsewhere. One may have doubts if the CCAs are not charging exorbitant fees so that they get their salaries. But one sympathizes with the CCAs if he examines the quantity of drug supplies obtained from the Ministry of Health.

TABLE 16

DRUGS SUPPLY TO COMMUNITY CLINICS

WAYBILL

TUOBODOM COMMUNITY CLINIC DATE 9/12/81

Name of Drug/Supply	Quantity	Period for Use
Tablets Chloroquine	200	14 days
Tablets Aspirin	200	"
Tablets Phenegan	100	"
Tablets Multivite	200	"
Eye Ointment	10 tubes	"
Elix Antepar	$\frac{1}{2}$ litre	"
Plaster	2 rolls	"
Gauze	6 rolls	"
Syrup Chloroquine	10 bottles	"
Cotton Wool	2 rolls	"
Ducolax	60	"

Tuobodom Community Clinic 12-12-81
Author's Research Survey, Dec. 1981

The population of Tuobodom in 1970 was 3,512 and it is estimated to be 5152 in 1982. This makes the above supplies woefully inadequate for

two weeks. In this case the CCAs would be tempted to over-charge when the monthly attendance to the clinics is declining. It must be remarked that at the time of the research no single clinic in the District was running wholly on funds from the community farm. The idea of community farms seems to be drying away; while a new way is being adopted to fund the running of the clinics. The basic assumption underlying the community clinic was that proceeds from the already established community farms would be used to finance the clinics. But as of now the method of funding is changing to charging fees. The BARIDEP has thus failed in this aspect. Most people are not prepared to pay the charges/fees which are getting closer to those charged at private clinics in Techiman or elsewhere since they 'own' the clinic. This view was expressed by 762 out of the 100 residents interviewed. Most of these people also find it incredible to hear that some drugs are purchased outside those supplied by the Ministry of Health. To them, the community clinics "have now become private enterprises of the VDCs operated by the CCAs." When asked why the extra supplies of drugs are not purchased from the Ministry of Health, all the 11 CCAs said the BARIDEP would question the source of the money and extra-purchases are allowed only when the cash came from proceeds of community farm(s).

4.8. Coverage and Patient Load of Community Clinics

The idea to set up community clinics aims at an expansion in health care coverage. The following table shows the population for which the community clinics cater in the district.

TABLE 17
POPULATION COVERED BY COMMUNITY CLINICS 2TECHIMAN

Population (1982 est.)	Functioning Clinics	No. of Villages	% of Total
Less than 100 people	0	0 (0.0)	0.0
100 - 499	1	2 (12.5)	9.1
500 - 999	4	5 (31.3)	36.4
1000 - 1499	0	5 (31.3)	36.4
1500 - 1999	0	1 (6.3)	0.0
2000 or more	2	3	18.2
TOTAL	11	16 (100)	100 .0

Source: Author's Research Survey December 1990

The largest village with a community clinic is Tuobodom with (1970) population of 3512. The smallest with clinic is Adutwie with 256 people.

TABLE 18
NUMBER OF VILLAGES SERVED BY COMMUNITY CLINICS IN
TECHIMAN DISTRICT

Number of Villages served by one Clinic	No. of Villages	% of Total
Less than 5 villages	3	27.3
15 - 19 villages	5	45.5
10 - 14 villages	2	18.2
15 or more	1	9.1
TOTAL	11	100.0

Source: Author's Research Survey, Jan. 1982.

Tuobodom serves about 14 other villages. The farthest average distance people walk or are willing to walk to reach a clinic is 4.8 miles (8 kms); and the closest average distance of the villages being served by the community clinics is 2.5 miles (4.2km). Majority (81.6%) of the community clinics cater for their own population but some - Nsuta, Tuobodom and Nkwaeso serve patients from outside their own village. Two-thirds (66%) of the 11 functioning clinics which have amongst their patients less than 1% visitors - patients who have their residence outside the village with community clinics. Two villages treat up to 7% visitors and in more than three quarters (81%) of the clinics (i.e. 9 of them), half or more of all the patients are younger than 15 years of age. Even in 6 (54.5%) clinics even more than 60% of the patients are children below 15 years.

TABLE 19
TYPE OF PATIENTS ATTENDED BY CCAs IN 11 VILLAGES

% of Old Patients	No. of Villages	% of Total
Less than 10%	1	9.1
10 - 14%	2	18.2
15 - 19%	2	18.2
20 - 24%	2	18.2
25 - 29%	2	18.2
30% OR MORE	2	18.2
TOTAL	11	100.0

Source: Author's Research Survey Jan. 1982.

TABLE 20
ATTENDANCE OF OUTSIDERS TO COMMUNITY CLINICS

% of Under 15 yrs.	No. of Villages	% of Total
Less than 40%	1	9.1
40 - 49%	2	18.2
50 - 59%	2	18.2
60 - 69%	5	45.5
70% or more	1	9.1
TOTAL	11	100.0

Source: Author's Research Survey Jan. 1982.

TABLE 21

Percentage of Outsiders	No. of Villages	% of Total
Less than 5%	4	36.4
5 - 9 %	3	27.3
10 - 19%	1	9.1
20 - 29%	1	18.2
30% or more	2	18.2
TOTAL	11	100.00

Source: Author's Research Survey Jan. 1982.

It is estimated that the daily average patient load of a CCA is 7 patients:⁶ The lowest patient load per day is put at 2 patients. On the other hand the highest daily total patient load is about 16. In general, the 11 CCAs attend to 150 - 160 patients a month or roughly 35 to 40 a week.

TABLE 22

MONTHLY AVERAGE NUMBER OF NEWLY REGISTERED PATIENTS
AND TOTAL PATIENT LOAD IN 11 VILLAGES OF TECHIMAN DISTRICT

Av. No. of Newly Registered Patients	No. of Villages	% of Total
Less than 100 patients	5	45.5
100 - 149 patients	3	27.3
150 - 199 patients	1	9.1
200 - 249 patients	1	9.1
250 - 299 patients	1	9.1
TOTAL	11	100.0

AVERAGE TOTAL PATIENT LOAD PER MONTH

Less than 100 patients	3	27.3
100 - 149 patients	2	18.2
150 - 199 "	3	27.3
200 - 249 "	0	0.0
250 - 299 "	2	18.2
300 or more "	1	9.1
TOTAL	11	100.0

Author's Research Survey - Feb. 1982

4.9. Operation of the Community Clinics

Fees charged from patients to the CCA do not differ from area to area. All the 11 clinics visited were charging between ₦10-₦15 for both children and adults depending on the seriousness of a patient's case and the treatment given. Most (86%) of the CCAs said the patients are able to pay. But they always want to pay lesser amounts. Some

⁶BARIDEP - A Review of 3 years. Experience April 1978p.15.

57 out of the 80 people interviewed (71%) resident in villages with community clinics said that the fees are manageable or alright; whilst the rest (29%) said it was too high since the people own the clinic. However further investigation revealed that 67% (11 out of the 17) of those who said the fees were too high are those who had not gone to the clinic before or had gone there for only once. No differential payment is charged for patients coming from outside the village or for visitors. No extra charges are also made for home visits. However, the CCAs do take gifts (in kind or cash) in appreciation of work done. Asked who fixed the fees charged at the clinics the following data was obtained:

TABLE 23

DETERMINATION OF FEES TO BE CHARGED AT COMMUNITY CLINICS
IN 11 VILLAGES IN TECHIMAN DISTRICT

BODY DETERMINATION FEES TO BE CHARGED	NO. OF VILLAGES	% OF TOTAL
CCA recommends and approved by VDC	7	63.4
VDC and CCA recommends and approved by the whole community	2	18.2
VDC alone decide and tell CCA to follow and takes decisions	1	9.1
VDC, CCA and the whole community meets and takes decisions	1	9.1
TOTAL	11	100.00

Author's Research Survey - Feb. 1982.

It is quite clear that fees are fixed mostly by the CCAs with the approval or consent of the VDCs. The communities are hardly consulted; their views are taken for granted. This seems to strengthen the argument by some residents that the clinics are now private enterprises of the VDCs cum the CCAs, manned by the CCAs.

Though most (98.2%) of the CCAs interviewed only reluctantly or even refused to admit to giving injections by claiming they don't know how

to give them about 45% of them get some extra income from fees from injections. This point is further proved right by three cases of abscesses due to injections referred to the Holy Family Hospital by CCAS which is on record. The two trainers in the Techiman District also confirmed the idea.

The checking of fee collected at the clinics is done mostly by the treasurers of the VDCs who also keep the money. Depending on cash flow of a clinic, the collection is done daily for the large villages weekly for the medium size and once a month for small villages. But the general case is weekly.

The capital costs for the establishment of the clinics have been generally covered by funds raised during the opening ceremonies and from the proceeds from the first and second community farms made. The average rent paid by the community clinics is ₵8.00 per month. But only two clinics (12.5%) pay rent (Ref. to p.18 Table 10). Besides rent charges, the VDCs are responsible for payment of expenditures like maintenance of clinic, furniture and equipment, stationery and etc. Many CCAs (62%) get the services of a sweeper to clean the premise for which duty she is exempted from communal labour. In some cases she receives free treatment when sick. But no free treatment is given; not even for members of the CCAs' own family. The only exception is made for school pupils sent to the clinic during school hours.

4.10. Problems

Three major problems inter alia face all the community clinic attendants - CCAs. They are: Lack of wholesome water for the clinic, lack of supervisory visits from the trainers, Ministry of Health or the BARIDEP and the unavailability as well as the insufficient supply of drugs. Table 16 of page 126 showing the two weeks' supply to

Tuobodom a large village of a population of 3512 clearly proved the last point. The supplies are shared out equally irrespective of the population in the settlements. Drug supplies are very inadequate and on most days the CCAs have virtually no work to do because they have no drugs and other supplies unless they purchase some from unauthorized courses. Of the 472 localities in the District in 1970, 458 of them (97%) take their water supplies from rivers. Only 2 localities - Techiman and Nchiraa (i.e. 0.4%) have pipe-borne water. Thus most of the drinking water in the villages is not wholesome or safe. To add more, only one out of the 11 clinics gets supervision in a month. About 3 clinics (27%) get no supervision at all in a year and the same number gets it once in 5 months. On the average, the community clinics are supervised only twice in a year. But the Holy Family Hospital, one of the training centres has already said that it meets its CCAs at the end of every month. When contacted the BARIDEP complained or gave the excuse of lack of and frequent breakdown of its vehicles. The programme had 2 VW Kombi buses, 2 Landrovers (and 2 tractors). Of these only two are on the road; the other two have broken down and no spare parts could be found for them. However the BARIDEP also rebuked the CCAs for failing to report any problems they have or arising at the clinics when they visit the BARIDEP headquarters every two weeks to collect their drug supplies. When approached the CCAs remarked that the time at their disposal when they go to collect supplies is usually very short, since they have to hurry and find trucks back to their villages. Moreover they have no place to sleep when they come to collect drugs.

4.11. EVALUATION OF THE COMMUNITY CLINIC PROGRAMME

It has been stated in the introductory chapter of this thesis that the Goal-Model Approach to evaluation was the criteria going to be adopted.⁷ The essence of this model is that a programme of action (e.g. the BARIDEP) has been planned and executed. This is later assessed in strict relation to stated general aims (Goals) and to the objectives (purposes) that are attainable or exist when the Goal is achieved. In so far as the aims of a programme like BARIDEP are well stated, its objectives can be turned readily into statements of behaviour or some objectively verifiable conditions or indicators that should occur (exist) if those objectives have been (or is) achieved. This is what has been done using the mechanism of Logical Framework constructed by the author for analysis attached at the Appendix. The behaviours or the objectively verifiable indicators - outputs are taken as the sign by the evaluator to determine whether the Goal(s) and the objective(s) have/has been achieved or not.

More specifically, the criteria of evaluation is comparing the data and analysis of this chapter presented below as the summary with

- (a) C-1 C-2 and B-2 i.e. the output and the end of project status of the project design.
- (b) B-1 is also compared with A-2 and A-1
- (c) Similarly D-1 and C-1 are also compared.

In all the above available data is also compared to the important assumptions to see if they are valid. The Data analysed above whose summary is presented below have been obtained from the criteria set by the criteria found at the Means of Verification Column. (See Logical Framework at the Appendix). Findings from the evaluation below using the data in this chapter and the Logical Frame are found under the summary.

⁷ Tripoli T. et. al: Social Programme Evaluation Itasca Illinois FE Peacock Publishers 1971.

4.12. S U M M A R Y

1. Techiman District has 16 out of the 48 clinics i.e. (33%) of the total so far opened. But only 11 out of the 16 (69%) are now functioning.
2. Of the total population (1970) of 53127 (now projected to 77530 only 16 localities (3.4%) have populations of more than 500 people. Thus 96.7% of the people live in localities less than 500 people. There are 472 localities in the District according to the 1970 population census. Thus it is only the bigger settlements that have community clinics.
3. The 16 communities who have community clinics have a total population of 25,379 i.e. 47% of the total population of the District which was 53127 in 1970. But only 11 community clinics are now functioning caring for a total population of 16112 or 30% of the District's population.
4. All the 16 community clinics are at least 5 miles from Techiman or Tanoso where health facilities are located.
5. All communities who have clinics were able to select their own CCAs for training based on their own criteria. About 90% of the CCAs volunteered for the training. The VDCs were very instrumental in the selection of the CCAs.
6. The training costs of the CCAs were borne mainly by the VDCs. Most of the CCAs are not related to the members of the VDCs but a sizeable number do.
7. Community money was used to sponsor most of the CCAs during training. The CCAs were receiving between ₵50-₵100 a week. This amount was inadequate.

8. The training lasted between 8-12 weeks on the average with at least 5 weeks of practical training. Most of the CCAs are/were satisfied with the duration but they wanted how to inject, suture and some basic midwifery to be added to the curricula.
9. The general performance of the CCAs is described by medical experts (- BARIDEP Officials, officials of the Ministry of Health and the CCAs trainers) as reasonable or satisfactory. About a third are even described as excellent while two **are** described poor.
10. The basic kits needed for the functioning of the community clinics were supplied on time by the Ministry of Health before the clinics opened. All community clinics have those equipment.
11. Most community clinics are housed in old village shops or old produce buying sheds. The rooms are not rented since they were donated free.
12. Almost all clinics attendants complained of accommodation problems. They still sleep in their private rooms contrary to the agreements reached before their training.
13. Fund Raising Harvests were the chief source of finance to set up the community clinics. Most communities could/were able to raise more than \$1000.00 an amount which could purchase partly the basic equipment.
14. Not all the CCAs are fully aware of the responsibilities of the VDCs, the BARIDEP and Ministry of Health, in the community clinic training programme. Most of the CCAs too are uncertain about the Government's intention. They believe the government wants to run the clinics, only the communities are being put to test to find those who should be helped.

15. All the CCAs are indigenous "village" people - Brongs. They are all literate and are between 20-24 years. Most are married and have family responsibilities. They work full time from 6 a.m - 6 p.m. But there are some variations in hours of work.
16. Most of the communities in the District have failed to honour their promises of rewarding the CCAs in cash or in kind, to supplement their income after training. The salaries of the CCAs are quite low, ranging between \$120 - \$180, far below a labourer's take-home pay.
17. Contrary to the design of the BARIDEP, most of the community clinics are being run not from process of community farms, but profits from fees charged from patients. The idea of setting up of community farms, the proceeds of which were to be used to operate the community clinics is dying away or is dead.
18. Drug Supply to the community clinics is regular i.e. every fortnightly and the quantity supplied is very inadequate. It is exhausted in a few days run and replenishments are purchased from the open market with its outdated and unpatented drugs and also very high prices. The community clinics are not able to purchase their extra-requirements of drugs from the Ministry of Health (or BARIDEP) because the source of the money for such purchases should come from proceeds of community farms and not profits from fees from patients.
19. The community clinic programme is found mainly in settlements where the population is less than 1500 but more than 500. Thus it is the medium-sized and very large villages that have clinics. Each of the 11 functioning clinics is serving an area of about 5 miles (8 kms) radius with an average of 6 villages to a clinic. Most clinics serve the needs of the residents of the village in which the clinics is situated. Only

a small minority of patients come from outside. Most of the patients are children under 15 years.

20. Most clinics receive between 35-40 patients a week or 150-160 patients a month. The fees charged for patients is uniform and is between \$10-\$15 per patient. However this amount varies with the seriousness of one's case. The fees are fixed by the CCAs and approved by the VDCs. The common people are not consulted.

21. Finally almost all CCAs have been acclaimed as having learnt their jobs well but some have resorted to practices they have not been trained for e.g. giving injections. This situation seems to have arisen because the CCAs have been receiving cases on them very frequently. The BARIDEP (or Ministry of Health) has not been regular in its supervisory duties. The clinics are visited only once or twice in a year.

From the above data a conclusion can be drawn that the Project purpose B-1 (See Logical Framework) has been achieved. This is because data available proves that C-1 the expected outputs have been achieved. Item 9 under the summary reveals that the end of Project status has also been achieved. But it must be noted that quantitative data to clearly prove this case is not available. This is because it was stated clearly at the (project) programme design stage that "assessing the impact of the programme in terms of changes in health status is (was) not the primary research goal of the evaluation component. Rather the focus was on various indicators of the establishment of primary health care." Therefore the BARIDEP aims at "how activities for improvement of health can be integrated into the general development process based on the community development approach." Moreover the programme seeks to evaluate this integration. From this standpoint then the following evaluative remarks are made:

1. The Goal of the programme A-1 has not been achieved in-toto. Only the medium-sized and very large villages have clinics. Most of the small villages still have no clinics. Only 30% of the people in the district have access to health facilities as against the 80% of the goal requires.

The requirement that a village should have at least 500 people before it qualifies for a clinic need be relaxed; since only about 3.4% i.e. only 16 out of the 472 localities have populations of more than 500 people. In fact they are also those with clinics. Thus about 97% of the localities (456 of them) have no clinics. Though on the average one clinic caters for 5 villages, only 80 villages (17%) are covered. Moreover 91% of the settlements in the District have less than 100 people. The poor coverage of the community clinics is partly due to the qualification that a village must have at least 500 people. This needs to be relaxed if more villages are to be covered.

2. The purpose of the community clinic attendant training programme has been achieved. (See B-1 of Logical Framework). But most clinics are not functioning (properly) successfully because the success of the programme hinges on the success or the ability of the community to make a viable community farm. The community farms have not operated successfully because of the failure of the communities to get on time tractor services and inputs like fertilizers, pesticides and insecticides.

3. The assumptions made when designing the programme are also valid. But the following have been found to be invalid.

(a) The Ministry of Health has not been able to supply drugs; and supplies are without consideration to population size. For instance Adutwie with a population of 256 gets the same supplies as Tuobodom with 3512 people.

(b) No community has been able to supervise its CCA and the Ministry of Health has not done better.

(c) Few communities were able to cater very well for their CCAs during their training and after the training. Thus most CCAs earn very low salaries.

4. Though quantitative data is not available the Beginning of Project Status (D-4 of Logical Framework) BOPS has not changed especially as regards water supplies. No improvement has been made since the initiation of BARIDEP.

However, the community clinic programme is recommended for the Primary Health Care Programme in any similar environment and in a country with our level of economic development.

CHAPTER FIVE

AN EVALUATION OF TBA TRAINING PROGRAMME

5.0. INTRODUCTION

Traditional Birth Attendants (TBA for short) Training is one of the action programme which have been started in the BARIDEP. The underlying goal is to make health care delivery the responsibility of the communities in the area. The intention (objective) was to identify all persons who are already involved in baby delivery and others who could be used to assist in delivery in their communities. Another aim of the TBA training programme was to improve the skills of the local TBAs and to train them to use the UNICEF midwifery kit (to be supplied) to do their work more effectively.

During September 1975 the basic outlines of TBA training were established by the health officials of BARIDEP (- the Principal Nursing Officers with previous experience in TBA training in the Danfa Project), after which identification of TBAs in the villages started. Beginning in the Nkoranza Local Council area, then the Techiman area and ending with Wenchi, majority of the villages in the programme area were visited. The purpose of the training was explained to the village Development Committees (-VDCs) first; and they were asked to identify TBAs and assist in gaining their co-operation.

During November-December 1975, preliminary classes were held for all TBAs who had expressed interest in the training. These preliminary classes were used to find from the TBAs what they do with respect to pre-Natal Care, Delivery methods and procedures for dealing with problems and Post-Natal practices. These experiences were recorded and in fact they demonstrated the considerable knowledge and experience of the TBAs.

The second part of the exchange of information started in January, 1976. Three training sites (including the BARIDEP headquarters) were selected and the TBAs were transported from their own villages to these more central villages. Training sessions were approximately one hour a week and training was carried out for 3-4 months. Training consisted of identification of danger signs in pregnancy with encouragement to refer these cases; improvement of existing methods including sterile methods; cord care and the use of the UNICEF midwifery kits.

By the end of 1977, 40 TBAs had been trained in the Nkoranza and Techiman Districts using four trainers (Miss C. Amaning of the Public Health Department, Techiman, Miss Tetteh of Yefri Health Centre and the Senior Personnel of Kintampo Health Centre and Holy Family Hospital Techiman). But the training of the TBAs in the study area (Techiman District) didn't take off early as scheduled. As at now (July 1982) only 15 TBAs have been trained for three communities - Asueyi (3 TBAs), Oforikrom (3) Buoyem (3) Mesidan (3) and Adutwie (3). However, twenty of them are still in training (See Appendix ...) for the names of villages and number of TBAs in training.

5.1. PURPOSE OF RESEARCH/SURVEY

The success of the TBA training programme depends on the usefulness of the supplied UNICEF midwifery kit (popularly called Delivery Bag); the traditional midwives' proficiency on the items and the newly learnt skills and regular supervision by the trainers.

The research for this chapter intended to:

1. Gather information on the trainers' and trainees impressions and experiences with the training.
2. Collect information on the TBAs' experience with the work so far done in their communities.

3. Measure the extent of field supervision so far given to the TBAs.
4. To assess the usefulness of the UNICEF midwifery kit as a whole.

It is necessary to find out whether the trained TBAs find all the items in the kit useful or redundant.

An evaluation on this last point is technical especially so because the author has had no medical training. Therefore technical assistance was sought from the TBAs' trainers. They invited 3 of the trained TBAs without their prior knowledge and they were asked to identify (in vernacular - Brong) the items in the kit bag (without naming them). Also much information was extracted from reports, the trainers have recorded on their own periodic assessments.

METHODOLOGY

Free interviews and informal discussions were held with all the 15 trained TBAs in the District as individuals and as groups using interview guides. Information on the usefulness of the UNICEF midwifery kit and the proficiency of the TBAs on the items it contains was obtained from the periodic records compiled by the TBAs' trainers for periodic assessment. The author and his assistants also had the opportunity to witness 7 weekly training sessions of 20 TBAs now in training at the Public Health Department in Techiman. Finally other documentary data were collected from Holy Family Hospital's Annual Reports and from BARIDEP Headquarters at Kintampo.

5.2. Project Philosophy and Benefits

Asked about their views on the philosophy of the TBA training programme, all the TBAs (15 in number) or 100%) perceive the philosophy as very good. They commented "We have been given recognition in the health care services." Three TBAs (20%) think the training is good but could show (indicate) specific gains they have made from it. The other 12 TBAs (80%) mentioned among other things that the programme shows that

- i. The government cares for villagers
- ii. the Ministry of Health wants to improve our knowledge and skills for assisting in deliveries.
- iii. our presence in the village will save our people from money, time and transport problems when they go to hospital.
- iv. we can now assist in deliveries in more hygienic ways and that we have also become doctor people.

Thus most of the TBAs seem to have a correct perception of the TBA programme. They see the training as a complement and not as any attempt to expose them to taxation or that their method was very crude and needed drastic modification. About 98% of the 15TBAs responded that though our traditional TBA practice is good it lacks "A lot of things," they said. They also expressed their sincere thanks to the authorities (UNICEF through BARIDEP) responsible for providing the midwifery kit which has made delivery quicker and easier for them. Of the 20 residents interviewed in towns with trained TBAs the responses were quite the same as the TBAs recorded above.

5.3. Conduct of the Course

The three trainers - Holy Family Hospital, Techiman, the Principal Nursing Officers, Public Health Department Techiman and the Nursing Officers, Yefri Hospital, were highly recommended for the competent manner in which they conducted the course. About 96% of the TBAs remarked that the trainers had patience with and were resourceful. Asked to explain further, the TBAs enumerated patience, the use of vernacular (Brong) as the medium of instruction, the use of simple and literary meanings to concepts e.g. "Builder" (Osidan - Brong) for protein, "Soldier" (for vitamins because it protects the body) and "engine" for carbohydrates; the use of tactfulness to correct and punish; the use of pictures, dolls (teaching aids) as some examples. Most (90%)

of the 15TBAs remarked they couldn't have gone through the course successfully if these conditions were not present. Thus the above conditions may be described as essential prerequisites to the successful conduct of TBA courses in future especially the use of audio-visual aids.

The interview with the TBAs also revealed that the TBA training course last between 10-12 weeks, after which the trainees are attached to a health institution for at least 6 weeks. All the 15TBAs had their "housemanship" in the District but 6 (40%) were trained outside the District.

5.4. Selection Of the TBA

The people of the Techiman District have accepted the idea of training TBAs. They were able to select successfully their own candidates based on their own criteria. This fact seems to be a good predictor as the programme continuation in future. Two major selection procedures of the TBAs can be distinguished. The first case is where a TBA volunteers (herself) when approached by the village Development Committee - VDC. The second is where the VDC contacts the TBA who demands that the whole community be contacted to approve or disapprove of her going to the training. But there is a third case of where the TBAs felt they cannot undergo the course because they are illiterates and the Village Development Committee - VDC and the Department of Social Welfare had to go to explain the running of the course before acceptance.

TABLE 1

SELECTION PROCESS OF THE 15 TBAs IN TECHIMAN DISTRICT

SELECTION PROCEDURE	NO. OF TBAs	% OF TOTAL
TBA Volunterrering No Community Approval	10	66.6
TBA Volunteering Community Approving	3	20.0
TBA coming out after contacts by VDC and Social Welfare	2	13.3

Source: Author's Research Survey - April, 1982.

The table (1) shows that most (67%) of the TBAs freely offered themselves for training. Asked why they thought the community would not reject their selection they all responded "they wouldn't because they can't live without our services. However, a minority (43%) were not sure the community would approve of their (further) training. They therefore refused to come out or asked for the community's approval before agreeing to go for the TBA training.

Asked whether they competed with others for the selection, the information in Table 2 was obtained. There was virtually no competition among the TBAs for selection to the TBA training. Evidence in the table shows that about 68% (i.e. 15 out of 22) of the TBAs found in the five villages have been trained.

TABLE 2

NAME OF VILLAGE	TOTAL NO OF TBAs	NO. OF TBAs TRAINED	% OF TBAs TRAINED
1. Asueyi	4	3	75
2. Oforikrom	6	3	50
3. Mesidan	3	3	100
4. Aduwie	4	3	75
5. Buoyem	5	3	60
TOTAL	22	15	AV. 68.18

Source: Author's Research Survey April, 1982.

Most (86.66%) of the TBAs were sponsored by their communities during their training. However a minority of them (13%) were sponsored by their communities and themselves. Asked why their communities could not sponsor them all replied that the communities could do that but they felt they were also going to benefit and thus borne part of the training costs. Findings revealed that the main training sessions were non-residential and the main cost involved was for transport. However, other costs were incurred when

the TBA

the TBAs went on attachment at the health institution after their training. Table 3 below highlights the above points.

TABLE 3
TRAINING COST OF TBA

ITEM	NO. OF TBAs	% OF TOTAL
Sponsored by community or TDC	13	86.66
Sponsored by a Relative	0	0.00
Sponsored by community/him/ herself	2	13.33
Paid training costs him/herself	0	0.00
TOTAL	15	100.00

Source: Author's Research Survey - April, 1982.

5.5. PERSONAL CHARACTERISTICS OF TBAs

All the 15 trained TBAs now working in the Techiman District are indigenous i.e. Brongs. About 75% of them are illiterates, 2 (13%) are literate and hold Middle School Leaving Certificate while the rest reached from 3 or thereabout but did not finish though they can read and write fairly well. See Table 4.

TABLE 4
EDUCATIONAL LEVEL OF 15 TBAs IN TECHIMAN DISTRICT

Educational Level	No. of TBAs	% of Total
1. No formal education at all	21	73.3
2. Middle School Leaving Cert.	2	13.3
3. Part of Middle School, Did not finish	2	13.0
4. Education more than Middle School	0	0.0
TOTAL	15	100.00

Author's Research Survey - April, 1982.

With the exception of one TBA (6.67%) who is widowed, all the rest are married and are staying with their husbands. The average number of children of the TBAs is about 8, but the number ranges from 5 - 10 children. With age, the youngest TBA is 34 and the oldest 60 years. The average is however 45 years. All the TBAs interviewed are farmers who work with their husbands. Moreover all of them said they work seven days in a week but on part-time basis. During the day the TBAs leave message with the CCA or the aged who don't go to farm to denote where they are going to work that day. Thus they are sent for when the need arises and they always don't hesitate, even before their training.

5.6. THE TABLE FOR TRAINING AND COURSE CONTENT

Majority of the TBAs (86.4%) indicated that the duration of the course (between 12 - 18 weeks) and the spacing of time table were quite good since the programme did not interrupt their farmwork. They met once in a week on Fridays (the market day of Techiman when transport to and from each village is easiest) and around 11 a.m. Thus most TBAs could visit their farms earlier in the morning before attending training sessions. The training session last on the average $2\frac{1}{2}$ hours a day, 30 minutes recapitulation of previous week's lecturers, one hour lecture in vernacular (Twi) and 1 hour practicals. Training sessions usually end around 2.30 p.m. to enable each trainee to get back to her village in time to prepare supper. However, 10 TBAs (68%) were of the opinion that the time for practicals was short and need to be increased. Asked to comment on the time-table the trainer at the Techiman remarked "I think the average of 14 weeks is alright. The trainees are able to pick up things and could master them in a shorter duration if equipment and a vehicle to collect them and move them around during training is provided."

5.7. TEACHING

There was almost a consensus on the rate of teaching. About 98% of the TBAs interviewed reported that the rate of teaching was slow enough for them illiterates to follow. "We did the same thing over and over again since we usually forget" - reported most of the TBAs. Some (62%) of the TBAs especially the young and the middle aged (30-40 years) confirmed that the trainers took their time to brief them on the functions of each item in the midwifery kit and how it is used. But three of old TBAs (20%, those who are 45 years) alleged that the use of some of the items in the kit was not explained to them. Those items were identified as the clinical stethoscope, cord dressing powder, kidney basin, methylated spirit and napkins.

OUTLINE OF COURSE CONTENT

The course was divided into four groups:

- (a) Ante-natal
- (b) Confinement
- (c) Puerperium
- (d) Use of delivery kit.

Ante-Natal: This part of midwifery is not done by most of the traditional midwives as such they were advised to show interest. The TBAs were taught the importance of diet especially high protein, regular feeding, personal and environmental hygiene and preparation for confinement. Referral of cases with minor ailments to the nearest Health Centre was stressed.

Confinement: The TBAs were taught how to recognize true labour, and also the three stages of labour (For convenience detailed information on what they were taught has been put at Appendix.

Puerperal Care: It was explained to the mothers how important this care, (i.e. from the first day of delivery to six weeks) to both mother and baby, as both are prone to infection. Much emphasis was put on good diet for the mother to ensure adequate supply of milk for the baby and the need to care for the breast. Regarding the baby, the TBAs were advised to dress the cord daily with cord powder until off.

Delivery Bag - The use of the contents (listed at the Appendix was demonstrated several times to enable TBA to get used to them. There was difficulty with handling of the artery forceps but with some tact and patience, all the TBAs were able to use them. Cleanliness of the instruments was much stressed.

5.8. THE USEFULNESS AND THE PROFICIENCY OF TBAs ON ITEMS IN THE UNICEF MIDWIFERY KIT (Delivery Bag)

The proficiency of the TBAs on the items in the UNICEF delivery bag and the usefulness of the items therein is shown in Table 5 and 6. (Note the tables were extracted from records at the BARIDEP headquarters).

When the 15 TBAs were interviewed (later) they stated that the UNICEF midwifery kit is very helpful even though not everyone of them has used all the items it contains. The reasons given by those who had never used the whole kit or most of the items it contains include:

1. "I was going to examine the lady before coming for the kit but when I got there the time was due for her to deliver and could not go back for the kit."
2. "I conduct delivery together with other TBAs in this village and we use only her it."

All those who have used the kit (87%) explained the kit among other things help to assist in deliveries much more efficiently and hygienically.

All the 15 TBAs were of the view that every item in the UNICEF kit was useful to warrant its inclusion in the kit. On further probing it was revealed that only one out of 15 (7%) TBAs had used all the 18 items (See Appendix for the list) in the kit for deliveries. Some described wrong uses for some of the items and others had forgotten the uses of the items.

It was also found during the research that the TBAs predominantly illiterates (74%) found difficulty in identifying the contents of items in bottles in the kit bag - Dettol, Methylated spirit and Eye drops. The hardest one was methylated spirit which is colourless, odourless and look like water. But 40% (6 TBAs) stated that during deliveries they call for help from literates to read the labels on the bottles. However, this is doubtful since the reader will only read the label which is written in English and may not know the use himself/herself. About 20% of the TBAs revealed that they did not know about the bottles and their contents and first discovered them when the kit was handed to them.

Asked to comment on the utility of various items in the kit, most (90%) mentioned:

- | | |
|----------------------|----------------------|
| 1. Stethoscope | 6. Plastic sheeting |
| 2. Kidney Basin | 7. Cord Ligature |
| 3. Scissors | 8. Forceps and Apron |
| 4. Cotton Wool | |
| 5. Methylated Spirit | |

as the most important items adding that at every delivery they (are) have to be used. Soap, sponge bowl, towel, dettol, cord powder and eye lotion were listed as fairly important but not crucial. "They are usually applied as hygienic checks and are not frequently used," the TBAs reiterated. The Amber dropping, Brush and Gauze pad were con-

sidered not important. They said they are rarely used and without them nothing lacks seriously in the kit.

Despite the fact that the artery forceps are considered very helpful only 4 out of the 15 TBAs (27%) interviewed could open and close it with ease and therefore use it. The rest 11 or 73% use the cord ligature. The gauze pad has also not been used by almost all the TBAs. They explained that mothers do not like it to be used on them and they prefer ordinary cotton wool. The general picture on the TBAs handling of the UNICEF kit is already shown in Tables 5 and 6.

When contacted for her impressions about the inability of the trained TBAs to use or handle some of the items in the UNICEF kit, the two trainers in the District (Techiman) together gave the following information:

With the Methylated Spirit, the failure of the TBAs to use it is understandable, they said. It was not used during the training session. The same applies to Dettol, an antiseptic. Regarding gauze pad, some of the TBAs could not remember the function because of the inclusion of cotton wool in the kit bag. The towel among the kit was not used because the size and form contributed to the failure of some TBAs to remember the actual uses of the towels. Some saw it as a cover spread for the kit; while others said they saw nothing of its sort during training.

The two trainers - Sister Amaning, Principal Nursing Officer at the Public Health Department and Sister Mary Anna Tregoning - Principal Nursing Officer, Holy Family Hospital, Techiman, lamented that the TBAs who had forgotten the uses of the Apron, Brush, Sthethoscope and Ligature prove only to be slow thinkers or learners. This category is found amongst the G TBAs over 50 years.

The general picture was that the old TBAs have weak memories and could not retain in their heads some of the things they were taught. Some of them, 2 (or 13%) had forgotten the uses of more than 8 items 44% of the total.

5.9. WORKING CONDITIONS OF TBA

Six of the TBAs passed out in 1978 while 9 came in 1979. As mentioned earlier on, all the 15 TBAs work 7 days in a week, day and night. They are thus always at post and ready to work. Despite the fact that the TBAs were identified through their Village Development Committees - VDCs, most (80%) of them are working on their own. After they were introduced to their communities by the VDCs as trained TBAs, the (13 out of 15) TBAs have received no help (monetary or in kind) from their committees. This is the situation at Asueyi, Oforikrom and Mesidan. With the exception of Oforikrom, where preparations are underway, all the other 12 TBAs (80%) complained that the VDC has refused to accede to their request for a furnished room where they could conduct deliveries. As of now all TBAs (100%) attend to deliveries in the rooms of expectant mothers who in most cases share room with their husbands. This situation causes a lot of inconvenience to the mothers the baby and to the husbands. Some of the TBAs (51%) revealed that the rooms of most of the labouring women are not "hygienic" enough for baby deliveries.

TBAs are usually exempted from communal labour in all the villages visited. However no example can be cited in any community where a farm or a group of people, men or women, have been sent to work on the private farm of any of the TBAs. But despite all these hardships all the TBAs have not ceased working. When asked the reason, they said they are not working for money, though they (would) receive any gifts offered; for they were doing the job long before BARIDEP's training came. However most TBAs charge between 2 ¢20-¢30 per delivery plus some 2-3 tablets of soap; as against ¢80-¢100 (excluding transport fares) at private maternity homes. The amount the TBAs are charging was fixed by their VDCs to cater for a day or two's need when they had to stay

PROFICIENCY ON ITEMS - INDIVIDUAL TBAS HANDLING KNOWLEDGE ON THE USE OF ITEMS IN UNICEF

MIDWIFERY KIT

CANDIDATES	VILLAGES	FORCEPS	SCISSORS	SOAP	SPONGE BOWL	KIDNEY BASIN	CORD LIG.	METHALATED	SPIRIT	SHEETING	PLASTIC	COTTON	WOOL	TOWELS	AMBER DROPP- ING	APRON	GAUZE	SITHEETHOS- COPE	CORD POWER	EYE LOTION
------------	----------	---------	----------	------	-------------	--------------	-----------	------------	--------	----------	---------	--------	------	--------	---------------------	-------	-------	---------------------	------------	------------

1	A																			
2	A																			
3																				
4	B																			
5																				
6	C																			
7																				
8																				
9	D																			
10																				
11	E																			
12																				
13	F																			
14																				
15	D																			
16																				
17	D																			
18																				
19	G																			
20																				
21																				
22	H																			

Source: BARIDEP Kintampo 1978

KEY: E = Easy to handle items D = Difficult or complicated to handle
F = Forgotten uses or don't know uses of items

TABLE 5 (Continued)

CANDIDATES	VILLAGES	Villages in Study																				
		FORCIPS	SCISSORS	SOAP	SPONGE BOWL	KIDNEY BASIN	CORD LIGATURE	METHYLATED S	SHEETING	PLASTIC	COTTON WOOL	TOWELS	AMBER	EN	DRIPPING	APRON	GAUZE	STHETHOSCOPE	CORD POWDER	EYE LOTION	BRUSH	
23	I																					
24	J																					
25	K																					
26																						
27																						
28																						
29																						
30	L																					
31																						
32																						
33	M																					
34	N																					
35	O																					
36	O																					
37	O																					
38																						

Source: BARIDEP Kintampo 1978

KEY: E = Easy to handle items D = Difficult to handle or complicated
F = Forgotten uses of don't know uses of items

TABLE 6

PROFICIENCY ON ITEMS - How the items in table 5 were handled by TBAs
in percentages

Name of Item	G R A D E S					
	E	D	F	DF	EF	
FORCEPS	10 26	26 68	1 3	1	-	Number %
SCISSORS	38 100	- -	- -	- -	- -	Number %
SOAP	37 97	- -	- -	1 3	-	Number %
SPONGE BOWL	30 79	- -	8 21	8 -	-	Number %
KIDNEY BASIN	36 95	- -	3 8	- -	-	Number %
CORD LIGATURE	36 95	- -	2 5	- -	-	Number %
METHYLATED SPIRIT	17 45	- -	21 55	- -	-	Number %
SHEETING PLASTIC	34 89	- -	3 8	- -	1 3	Number %
COTTON WOOL	34 89	- -	4 111	- -	- -	Number %
TOWELS	28 74	- -	8 21	- -	2 5	Number %
AMBER DROPPING	8 21	- -	30 79	- -	- -	Number %
DETTOL	24 63	- -	13 34	- -	- -	Number %
APRON	37 97	- -	34 1	- -	- -	Number %
GAUZE PAD	20 52	- -	17 45	- -	- -	Number %
STETHOSCOPE	31 81	4 11	2 5	- -	- -	Number %
CORD POWDER	30 79	1 3	6 15	- -	- -	Number %
EYE LOTION	33 87	- -	5 13	- -	- -	Number %
BRUSH	36 95	- -	2 5	- -	- -	Number %

*Source: BARIDEP, TBA Training Programme 1978 Kintampo.

in the house and attend to deliveries. The amount is supposed to be used to buy soap, foodstuffs and hire labour to work on TBAs' farm when they stay away.

5.10. Coverage And Patient Load of TBAs.

Almost all TBAs work in their home villages. Of the 15 interviewed only 2 or 13% have gone outside their villages to help in delivery. This seems to be the situation because transport facilities are lacking, forcing each town or village to have its own TBAs. Asked if the women in other villages know of their training, all the TBAs responded yes and even said they had been known before their training. Asked why they are not normally called to attend to women in other villages, the reply was "they have their own local TBAs."

On the average the TBAs said they had helped to deliver about 300 babies each since they passed out three years ago. This gives about 100 deliveries a year or 8 in a month. In this case one could say that the patient load is manageable and allows the TBAs time to work on their farms. But it must be noted that the coverage of their work is limited to only their villages and only 6 localities out of the 472 localities in the District have trained TBAs. N/B bigger villages are demarcated into more than one locality; there is some physical separation between sectors of it. But normally one locality constitutes one village.

5.11. SUPERVISION OF TBAs

The TBAs are supervised by their trainers, but this supervision according to the TBAs is not done regularly as was promised. The Holy Family Hospital, one training centre gave the excuse of breakdown of their vehicles and lack of trained staff to relieve the heavy work on the Principal Nursing Officer who is also the trainer. The BARIDEP too gave the same excuse, but the Public Health Department must be congratulated for visiting some TBAs once in a month. So far 11 out of 15 (i.e. 73.3%) had never

been supervised since they passed out. This is very serious since it was reported that most of the replenishable stocks in their kit bag have long been used up. Moreover, most of the TBAs feel very down-hearted because their trainers are no more interested in them. Only crash supervision came in June, 1978 when 6 TBAs were rushed to the Holy Family Hospital Techiman when the nurses embarked on an industrial action which paralysed the hospital. That year's hospital report stated that the 6 TBAs were able to keep the midwifery department for good 21 days; the report said they worked just like the midwives. However most of the TBAs want to have regular supervision so that they discuss their problems with their trainers.

5.12. Evaluation

The criteria of evaluation like in Chapter 4 is by comparing the findings of the Research on the TBA training programme with what the programme Design (Logical Framework) set out as the conditions that would exist at the end of BARIDEP (1981) i.e. the EOPS. The assumptions that were made during the design and initiation of the programme are also to be evaluated to see if they are valid or should be changed whenever this programme is being replicated somewhere. The summary of the Chapter is presented below.

5.13. S U M M A R Y

1. Both trainers and all TBAs perceive the idea of TBA training as laudable one which will go a long way to enhance their utility in their respective communities.
2. All TBAs acknowledge that their "skills and ideas have greatly improved through the training." Before the training most of them could handle only easy deliveries but after training "only few complicated cases cannot be handled by them."

3. Except one TBA who indicated that the reduction in their practical attachment period from five to two weeks at Techiman Holy Family Hospital affected their practical skills ("We could have learnt more."), all trainees were inclined to think that the training was complete.
4. All the TBAs paid tribute to their trainers for the patience and tolerance they had for them during the training. Some had this to say. "Illiterate and old as we are, we will tell our trainers that we have understood what they have taught us and promise not to forget but the next day we forget and deny that we have been taught. But they had the patience of primary class one pupils' teacher to teach us again. The speed and language of instruction (vernacular) was alright to the TBAs and worthy of emulation.
5. Two trainees have so far not used their kit to assist in any deliveries. It was also clear that among those who have used the kit not all have used every item in the kit. Some of the items had been found easy to handle, others difficult to use and the uses of some had been forgotten.
6. The most useful items in the kit were identified as: the Stethoscope, scissors, cotton wood, kidney basin, forceps, mackintosh, apron and cord ligature. Items connected with injections (ergometrine, syringe needles) and those which can be used only by educated TBAs e.g. Baby scale, clinical thermometer etc. were marked as not needed in the kit.
7. The UNICEF Kit is adequately equipped to conduct deliveries. A few items still needed in the kit include: Enema set, hand gloves, Drugs to stop bleeding, torchlight, catheter soft rubber for sucking mucus from baby's throat according to:
- (8) In all the communities delivery charges were fixed by the Village Development Committees and range between ₵20-₵30 per delivery. But most TBAs rather want gifts in kind than money.
9. Trainers were impressed with TBAs level of performance at the end of the course but recognize that there should be follow-ups in the field to identify

areas for retraining.

10. No follow-ups have been made by trainers to the fields because of transport difficulties, volume of work at their posts and annual leave periods of the trainers.

11. Personal problems of trainers in connection with the programme include transport delays and big volume of work.

Looking at the End of Project status of the Project Design B-2 (Ref to Logical Framework) and from the summaries above, it is clear that the TBA training programme has achieved the Project purpose. But it isn't all villages that have trained TBAs, as it was assumed by the BARIDEP. Also the TBAs cannot as yet run ante-natal and post-natal clinics. The following recommendations may be necessary for the successful running of TBA training sessions and for their maintenance.

5.14. Recommendations

1. Discussions should be held between the officials of Social Welfare and Village Development Committees on the possibility of assisting TBAs to get a decent and furnished room (like the community clinics to conduct all deliveries.
2. The respective trainers should be involved in the selection of items from the standard UNICEF Midwifery Kit to make up the kit for the TBAs.
3. In view of difficulties faced by most illiterate TBAs in identifying the contents of bottles, it is recommended that the shapes, size and colour of bottles should be changed to make it easier than to identify their contents.
4. Proper working relations should be established between the Holy Family Hospital and other private hospitals and the Ministry of Health to ensure their co-operation if their facilities are intended to be used for practicals.
5. There should be refresher courses for practising TBAs to recapitulate

some of the things they learnt.

6. The trainers should be provided with more teaching aids e.g. skeleton pelvis.
7. The problems of the trainers (transport and volume of work) should be tackled to get them to follow up the TBAs in the field. To achieve this a bold effort should be made to involve other competent midwives and Public Health Nurses in the TBA programme.
8. The suggestions given by the TBAs on the composition of the kit should be carefully considered and accepted.

The BARIDEP ended its operations with the TBA programme. Other activities like the Health Education, Rural Newsletter etc. were also carried out but have been left out because of the brevity of their duration and very small area of operation in the programme area. The subsequent chapter concludes the activities of BARIDEP and make recommendations.

CHAPTER SIX

6.0.

SUMMARY AND CONCLUSIONS

The purpose of this section of the thesis is to briefly record the general observations about the achievements and experiences of the BARIDEP in the Techiman District Council area from 1975 (beginning) to 1981 (the end of the project). These observations and recommendations are based not only on the overall evaluation of the results of the programme, but also on:

1. the general direction the programme has taken in the study area,
2. important problems which have been experienced,
3. the areas of the programme which require strengthening and where appreciable results have been made and
4. the extension of the programme approach to other parts of Ghana or developing countries.

However these observations and recommendations may apply to all the BARIDEP area.

The focus of the Chapter is on the nature of BARIDEP'S efforts to initiate, establish, support and extend various activities - Community clinic programme, community farm programme and the traditional birth attendant programme - that fall within the general programme approach. The observations and recommendations are structural according to activities necessary to initiate the programme approach, those dealing with the establishment of activities at the community level, activities in support of community self-help projects, and actions to extend the implementation approach and its components to broader areas. Suggestions are also made for improving the effectiveness of the evaluation component. In any case the detailed evaluative results and recommendations have been presented at the end of Chapters two, three, four and five.

6.1. INITIATION

The initiation of the BARIDEP required co-ordinated approach based on a common orientation to both problems and the steps to be taken. This was absent at the outset and had been partially achieved at the close of the programme. The BARIDEP was very much seen as a health project that only affected the other district personnel marginally, if at all and this problem also partially exists now. There were problems in determining the coordinative and directing responsibilities of a District Medical Officer of Health and the District Chief Executive of then newly established Techiman District staff of all ministries as well as facilities and supplies were short and could not be readily stretched or re-allocated to other activities.

There was a commitment at the Central Government especially on the part of Ministry of Health and the (then) Department of Social Welfare and Community Development and to a lesser extent other ministries (e.g. Education) to carry out the programme. Various co-ordinative efforts and orienting steps were taken starting from this base. In retrospect, this stage was most important, but could be strengthened considerably. Extensive discussions and orienting sessions should take place among the senior staff at the district level. There should be a recognition that the approach advocated calls for not only technical knowledge about the rural area, but practical knowledge about: communicating with, mobilizing and working with rural communities. This orientation stage should also emphasize the importance of a co-ordinated effort in working with rural communities and should result in practical working plans for the co-ordination. It is being proposed that the same orientation approach should be carried out for the more junior workers.

It is being suggested that the District Chief Executive - DCE be the principal co-ordinator and director. Other officials will operate in their own technical capacities, including the Senior Medical Officer or otherwise of the Holy Family Techiman, who will also act for public health activities in the district.

It must be consistently and strongly emphasized that programmes of the BARIDEP nature are national and not an international responsibility. Related to this is the need to clearly establish guidelines for staff duties of those involved as national consultants, advisors or otherwise engaged to work in the programme.

Regional officers, while aware of the BARIDEP have not felt there was any substantial co-ordination responsibility which fell to them. This is partly because only 3 out of the 9 districts in the region are involved, and partly because of the rather direct links that exist between some (e.g. health) of the BARIDEP officials and their national counterparts.

Communication between the various departments is an important element of co-ordination and this goes beyond the mechanism of meetings at the senior level. "All" government workers in the District should be kept informed of general developments in the BARIDEP (or any similar programme) and should have an opportunity to see their own role in much larger set of activities. The erstwhile attempt to use a rural newsletter like the BARIDEP's "Dawuro" - the gonggong is highly recommendable.

6.2. ESTABLISHMENT OF ACTIVITIES AT THE COMMUNITY LEVEL

The BARIDEP has used a number of approaches to contact and establish entertaining films were shown in many of the larger villages using a mobile film van. These shows were followed by discussions with the village/Town Development Committees - T/VDCs. This approach is useful but difficult to replicate on a broad and continuous basis. One-day seminars have been held with the T/VDCs from a number of villages during which several government officers from various departments discuss development activities that the T/VDCs may/(wish to) take up. Portable slide projectors (provided by UNICEF) were sometimes used to show a series of specially developed slides from the programme area which portray ways in which communities may decide to mobilize for various self-help projects.

The methods have been reasonably effective and needs to be continued; especially if they can be strengthened by broadening the base of government workers who have the skills and experience to work directly with the mobilisation of community self-help efforts, *a.g.* trained community development workers.

However, since even this may be difficult to achieve, two other approaches are also recommended:

- (a) Assuming that the initial efforts in mobilizing rural communities may be the most difficult, it may be expected that after a number of activities have been started and are visible, other communities will begin to initiate contact themselves and will emulate the projects already in operation in the more pioneering communities (Systems Approach). If this is the case, then a more intensive concentration of skilled community development workers would be justified during the initial stages of the programme application in any given time.
- (b) Secondly, and complementary to the ways in which traditional structures could be used to orient the community leadership to the BARIDEP goals and to mobilize communities for self-help projects. These traditional structures constitute communication and leadership resources, and greater effort should be made to build upon these resources.

Greater co-ordination between operating departments through such practical means as co-ordinating itineraries in order to make more effective use of scarce transportation is also recommended.

6.3. SUPPORT TO COMMUNITY SELF-HELP PROJECTS

This support took the various forms of training community health workers, material and logistical assistance, supervision, technical advice, as well as the various ways in Government staff were enabled to work more effectively with the community self-help efforts.

Training is one of the most important ways in which the government is supporting community efforts. The community clinic programme as well as the Traditional Birth Attendant (-TBA) programmes are examples of community - Government co-operation in which the Government is largely responsible for the design and execution of the training aspects.

Training is one of the most important ways in which the government is supporting community efforts. The community clinic programme as well as the Traditional Birth Attendant (-TBA) programmes are examples of community - Government co-operation in which the Government is largely responsible for the design and execution of the training aspects.

Both programmes require education which is practical and skill-oriented as opposed to knowledge-oriented, educational methods which are flexible and geared to the background and skills of the village health workers, and training which is carried out as close as possible to the type of setting in which the workers (were going to) will function. While these principles have been acknowledged, it is apparent that this type of education requires a drastic shift away from traditional educational methods, and that this shift has not always been successfully made. It is specifically recommended that the importance of practical educational methods be recognised and that greater personnel and other resources be devoted to these tasks, especially through the use of workshops and other methods to train people to perform these tasks more effectively.

There is also the need to develop more systematic curricula for training of the various categories of Village Health Workers - TBAs and CCAs, since this training is carried out in a number of places and with only intermittent co-ordinating between the trainers, who also carry out other functions. Preliminary evaluations by the BARIDEP and this study show a reasonably very high level of utilization and satisfaction by the population of the area. Both the community Clinic Attendants - CCAs and the Traditional Birth Attendants - TBAs, need considerable financial support

and or incentives other than the meagre remunerations from 'out-dooring' harvest funds. They are also facing persistent difficulties with regularity of both supplies and supervision. It is being suggested that all efforts should be made to provide tractor services at the right time for it is the chief factor hampering the effective organization of community farms. This is a pre-requisite because the successful running of the community clinics and other community projects depends on the success of the farms which are supposed to raise the much needed funds.

A related recommendation concerns the content of the work performed by the CCA. It is clear that both community priorities and the background experiences of the CCA trainers have oriented the community clinic attendant - (CCA) functions toward curative or symptomatic medical care with an emphasis on the use of medicinal preparations. There is no question that a more prevention and promotion oriented health care is required, but it is not yet clear how this will evolve. It has been suggested that this type of content will be introduced through re-training and refresher courses for the CAAs. This is not desirable, but there are practical limitations both to what a single worker may be able to assimilate and perform, and to the community members willingness to pay for, and on a free-for-service (or advice) basis. Therefore attention should also be given to other channels which might be used in the delivery of this type of care, especially as complements to the work of the CCA and TBA.

For example, school teachers (trained) could especially be valuable in the local organizational and record-keeping of immunization programmes. Village Development Committees - VDCs may have the responsibility for carrying out environmental sanitation and water supply projects. Village Nutrition workers (a programme which was briefly started but is now curtailed because of the inability of government nutrition workers to regularly visit the villages) could organise their work not only around cooking demonstrations, but also include child care for pre-school children which

might be financially self-sufficient and could include monitoring of the growth and development of the pre-school population of the villages. These are only some suggestions, and obviously others could be effective in attempting to extend the content of promotive and preventive health within the programme.

Technical support (and again tractor services for community farms) is also required to make village projects - (such as community clinics, building schools, water supplies and other communal facilities) more effective. Guidelines may be developed which would transfer technical knowledge more effectively from central levels to less-experienced workers at the periphery of government service (especially the Ministry of Agriculture). Schemes of vehicle ownership (preferably motor-bicycles) and use by junior government staff would also enhance the supportive function of the Government's activities.

The above recommendations are not made lightly. There are definite limits to what can be provided and paid for. But the need for this support is inherent in the approach taken by this programme. The need for a supportive infrastructure was foreseen, and now this need has been underlined. The goal was to attain a much greater level of coverage of health care and other development - related activities for the rural population of the area. It is apparent that the interest and resource contribution of the communities can be attained as part of the answers to accomplishing this goal, but this community involvement can only be effectively sustained if the appropriate supportive activities of Government (an all associated Ministries) - even if these are limited to what is practically possible - are available on a regular basis or right time.

EXTENSION OF THE ACTIVITIES

The BARIDEP has been a type of field laboratory test out of various ideas and technical activities within a general programme approach and to determine how applicable they could be on a broader basis. There

appears to be two levels of this potential extension:

1. the specific self-help projects such as the CCA or TBA programmes or specific types - community.

6.4. EXTENSION OF THE ACTIVITIES OF THE BARIDEP

The BARIDEP has been a type of field laboratory test out of various ideas and technical activities within a general programme approach and to determine how applicable they could be on broader basis. Specifically, the programme set out with the following aims:

1. To assist the rural people to undertake projects which will enable them to provide some basic social amenities for themselves.
2. To assist the provision of health and agricultural extension services to the rural farmers in order to increase their productivity and thereby raise their standard of living.
3. To obtain balanced distribution of primary health and other amenities. In this bid the BARIDEP hopes to improve the rural population's health in order to increase their productivity.
4. To encourage the rural community to undertake other self-help projects which can provide social amenities such as such as water, schools etc.¹

It was against this background that the BARIDEP initiated, helped to establish and supported community farms and the training of CCAs and TBAs.

It has already been reported in this study that the stated objective of the BARIDEP as regards community farming has not been achieved on quantitative terms. But there are very positive indications of achieving it in a short time. Similarly, the study has proved that the purpose of the community clinics are not functioning properly because of the unsuccessful organisation and operation of community farms. Findings also show that the purpose of the TBA training programme has also been achieved, though not all villages have trained TBAs as envisaged. And that some TBAs are

¹ BARIDEP - Baseline Survey, 1977 p. 3 Kintampo.

are not giving ante and post natal services.

It is quite clear then that the BARIDEP to a very great extent has achieved its stated aims and objectives though the programme has not done much as regards encouraging the rural people to undertake other self-help projects. A conclusion could therefore be drawn that the BARIDEP experience could be extended to other areas under a primary health care system. For most part, the available data and findings show that : (1) the people of the programme area have been interested in the approach (2) have expressed their willingness to participate and taken up their responsibilities, and (3) have in most cases done so.

Definitely, the BARIDEP has had successes and failures and for the programme's experiences to be more applicable or workable in other areas it is recommended among others already made in the text that:

1. The BARIDEP's baseline survey be adapted (where necessary) to suit local conditions.
2. Contacts should be developed or maintained with all bodies, governmental or non-governmental bi or multi-lateral in Ghana or other countries, involved with health. In Ghana the following are recommended:
 - a) Department of Community Medicine, University of Ghana Medical School.
 - b) the School of Medical Sciences - University of Science and Technology, Kumasi.
 - c) Centre for Development Studies, University of Cape Coast (for research data) and
 - d) the personnel connected with the Danfa and other similar projects.
3. It is proposed that the training of Traditional Healers/Herbalists (as is being done by the Holy Family Hospital Techiman) be included in the programme.

4. It is proposed that provision be made to make it official or 'lawful' for the CCAs to purchase drugs from the Ministry of Health with funds other than those which come from community farming. The drugs are cheaper and of quality.

5. The BARIDEP adopted the Systems Model of Evaluation. Thus substage evaluation of the individual projects were done for direction and guidance in moving to the subsequent frame and project area. Very little time was (available) taken to study and fully evaluate the projects. This seems to be the basic reason explaining why preceding projects were 'collapsing' while subsequent ones were flourishing. Data or at least some guidance now exists. There is the need therefore to change to the Goal Model, where specific targets are set for implementation and evaluation of projects. This may save money, time and resources.

	TOTAL EXPENDITURE
1970-71	24.21
1971-72	34.03
1972-73	41.97
1973-74	71.28
1974-75	105.23
1975-76	111.71
1976-77	128.47
1977-78	107.73

*Source: Ministry of Finance - Economic Survey, 1977.

APPENDIX 1A

PERCENTAGE DISTRIBUTION OF HEALTH EXPENDITURE

Type	1973-74	1974-75	1975-76	1976-82
Preventive Medicine	12.3	10.3	9.7	Not available
Curative Medicine	77.1	76.3	75.9	" "
Research	0.2	0.4	0.4	" "
Others	10.4	13.0	13.9	" "
TOTAL	100	100	100.0	

Source: Ghana Medical Journal Vol. 4 1975

APPENDIX 1B

MINISTRY OF HEALTH EXPENDITURES 1971-1977: FIGURES IN MILLIONS OF CEDIS

FISCAL YEAR	TOTAL EXPENDITURE
1970-71	34.51
1971-72	34.03
1972-73	41.97
1973-74	71.22
1974-75	103.28
1975-76	112.11
1976-77	128.41
1977-78	183.75

*Source: Ministry of Finance - Economic Survey, 1977.

APPENDIX C

A DISEASE PROBLEMS OF GHANA RANKED IN ORDER OF IMPACT ON
& HEALTH STATUS

ORDER	DISEASE CLASSIFICATION	% OF TOTAL
1	Malaria	15.4
2	Prematurity	9.1
3	Measles	6.1
4	Birth Injury	6.0
5	Sickle Cell	5.9
6	Pneumonia (child)	5.5
7	Kwashiorkor - Morasnus	5.1
8	Dysentery and Gastro enteritis	4.5
9	Neo-natal Tatanus	3.7
10	Accidents (all kinds)	2.9
11	Tuberclosis	2.7
12	Cerebro Vascular accidents stroke	2.4
13	Pneumonia (adult)	2.3
14	Psychiatric disorders	2.3
15	Cancer	1.9
16	Pregnancy complications - all kinds	1.6

Source: Primary Health Care Report 1979, Accra.

APPENDIX 1DREPORTED CASES OF COMMON DISEASES : 1971- 1976

YEAR	MEASLES	YAWS	TB	WHOOPI NG COUGH	MALARIA	HEPATITIS
1971	94870	12447	5605	14664	75062	9510
1972	95521	22199	5201	18261	131664	10910
1973	94198	43766	5985	17191	212046	15828
1974	9135	51432	6354	12486	117395	17240
1975	140821	59926	6555	22009	252725	14393
1976	131405	71765	6174	22348	443310	16272

Source: Primary Health Care Report 1979, Accra.

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