Evaluations of the Botswana National Literacy Program (BNLP) are reviewed, with emphasis on one internal and one external evaluation. The BNLP may be one of the most extensively evaluated national literacy programs ever conducted, with a program staff intensively trained in evaluation. One lesson of the repeated evaluations of the BNLP is that a point comes when evaluation may use resources needed for program implementation. Evaluation cannot be fully exorcised of politics; however, the political ramifications must at least be clarified and the worst political encroachments resisted. Internal evaluations seemed to serve program implementation better and demonstrated the usefulness of the Action Training Model. The need to intervene and control partly explained when and why the various evaluations were commissioned and what use was made of evaluation results. (SLD)
EVALUATIONS OF BOTSWANA NATIONAL LITERACY PROGRAM:
THE POLITICS OF PENOVATION AND CONTROL

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To evaluate is to judge the merit and worth of what is being evaluated (Guba and Lincoln, 1981). But judgment must be rendered within a contexture of competing values. As a result, the professional commitment to renovate a program gets confounded with the political commitment to control, and, thereby, to obtain a particular distribution of social goods in a particular social setting (Bhola, 1975). Evaluation becomes a political act (House, 1973; Palumbo, 1987; Rossi and Williams, 1972).

The professional and the political in evaluation intersect at many points of the evaluation process: in the initial decision to evaluate a program, in the choice of the time-frame of evaluation, in the selection of evaluators and of samples and methods, in the establishment of norms of success or failure, and, of course, in the utilization of results (Glover and Strawbridge, 1985; Hall, 1978; Lindblom and Cohen, 1979; Weiss, 1976).

An important issue in program evaluation is internal evaluation versus external evaluation. Internal evaluation is conducted within the institution that is also responsible for the program, ideally, by the same people who are responsible for the implementation of the program being evaluated. External evaluation is conducted by agents external to the institution responsible for the program, and sometimes external to the culture. The debate on the relative merits and demerits of
internal and external evaluation has been conducted in scientific terms of objectivity of results. It does not seem to be realized that neither internal nor external evaluations per se have a monopoly on objectivity or on meaningfulness; that objectivity may not be the point; and that the point may indeed be the locus of control and of return of benefits from the program.

In this paper, the many evaluations of the Botswana National Literacy Program (BNLP) are reviewed, with focus on two major evaluations -- one internal, the other external. The review will demonstrate that while discussions among the various stakeholders were conducted in the language of program improvement, the need to intervene and control was part of the explanation of when and why the various evaluations were commissioned and what use, if any, was made of evaluation results.

DEVELOPMENT AND PROGRAM CONTEXT

Botswana (formerly, the British Protectorate of Bechuanaland) which became independent in 1966, is in many ways a typical Third World country, riddled with poverty, illiteracy, and political dependency. It has, however, some special characteristics that are noteworthy. It has a small population of around one million, spread over a large country of the size of France, two-thirds of which is covered by the inhospitable Kalahari desert. It is a country rich in minerals and fortunate in its leadership that has decided to use the country's mineral wealth in alleviating peoples' poverty. The most important development goals of the country are employment creation and rural development. Both require sizeable inputs of education and
Botswana Literacy Evaluations

extension for implementation. The government has, first, assigned an important role to out-of-school nonformal education; and, then, made print communication central to the delivery of nonformal education and extension. The policy is rooted in the realities of a significant part of the population bypassed by the formal education system; the impossibility of being able to provide face-to-face extension services to farmers in widely scattered villages and cattle-posts for lack of personnel and infrastructures; the inadequacy of the radio broadcasting network and its inherent inability to carry the whole communication burden; and the hope that a literate people would become independent, effective and frequent users of development information (Bhola, 1985).

Botswana's mineral wealth does not make it self-sufficient, by any means. The country needs both technical and material assistance to overcome underdevelopment; and it is, indeed, receiving considerable foreign technical assistance in all the various sectors of development. The BNLP is one of the many externally funded project. Inputs from the Government have been relatively small. The 1987 evaluation study of BNLP (Gaborone, et al., 1987: 92) estimated that within the development budget, donors have provided 91% of the development expenditure since 1980 and 72% of the total costs. The Swedish International Development Authority (SIDA) provided 42.5% while 36.4% came from the German Agency for Technical Assistance (GTZ). SIDA has chosen not to be directly involved in the day-to-day working of the BNLP, but GTZ has. During 1982-84, GTZ sent a German expert who was appointed Literacy Coordinator to head the
GTZ has also commissioned a number of evaluations of the BNLP.

The history of the BNLP is a few years longer than its association with GTZ. After some pilot testing in 1979 and the experimental year of 1980, the BNLP had been launched in June 1981 to cover all the nine districts of the country. All illiterate adults and youth ten years and older were targeted by the BNLP. They were estimated to be some 20% of the relevant population, between 250,000 to 300,000 in number. Illiteracy was to be completely eradicated by 1985/86, that is, during the life of the Fifth National Development Plan (NDP5), covering 15,000 adult learners in the experimental year of 1980 and then adding 50,000 a year until all of the illiterate population would have been covered. Each cohort of adult learners would receive 12 months of guided and supervised instruction in reading and writing in Setswana. At the end of 12 months they would be given self-instructional materials to be learned independently by each learner (Bhola, 1985). The enrolment targets envisaged in NDP5 have proved to be unrealistic. The Sixth National Development Plan (NDP6), 1985-91, has already extended the BNLP, enabling it to operate until illiteracy is fully eradicated from the country (Botswana Government, 1985).

CONCERNS WITH EVALUATION

The BNLP is perhaps one of the most extensively evaluated national literacy programs in recent memory (Bhola, 1984b, 1985; Bhola, et al., 1983; Gaborone et al., 1987; Unesco, 1976). Starting from 1979 up to the time of writing, it has
undergone multiple evaluations, both large and small (Gaborone et al., 1987). The BNLP, again, may be the only literacy program in the Third World with its senior program staff so extensively trained in evaluation planning and implementation (Bhola, 1984a).

A Pre-natal Evaluation, 1978

The seeds of the BNLP as well as of concerns for evaluation were sown in a pilot project of functional literacy implemented and evaluated by the Botswana Extension College (1978). The pilot project had been developed especially for gaining experience for conducting the BNLP to come later. In terms of professional knowledge, this evaluation produced facts and insights that hold true ten years later.

This evaluation covered about 1,335 learners in some 59 learner groups in three pilot areas; and used class records, tests and observers as sources of data. The report had found that learner recruitment was no problem, there were always more learners than could be served. However, 82% of enrollees were females and 77% were in 15-30 years age range. Learning to read and write one's own letters, received from husbands who were away working in the mines in South Africa, was a predominant motive for joining classes. Only one in five students dropped out but irregular attendance was widespread. Group leaders dropped out about half as frequently as did learners. There was dissatisfaction with the amount of honoraria received by Literacy Group Leaders.

Formal testing of adult learners had been an almost complete failure. On the basis of visits it was concluded that
in "successful groups" learners had shown good progress in reading and writing in 15 weeks, but for most groups 15 weeks was not enough. Most learners would have been unable to read unseen materials. Radio helped recruit learners but did not teach them anything useful. Teaching materials were inadequate, as were follow-up materials. Those who learned to read and write did not learn to discuss. There was no evidence of transfer of learning to action projects; and self-awareness, another objective of the functional literacy project, was rarely achieved. Weak leaders were found to belong to too many local clubs and organizations. Strong leaders followed the teaching method most closely. Leaders themselves were unable to initiate discussion within groups. It helped the discussion if the group was segregated by age and if people were arranged in pairs. Supervision was found to be an important need. The most important lesson offered to evaluators was: Always go and look for yourself. Records and test data are not enough (Botswana Extension College, 1978).


A Department of Nonformal Education (DNFE) had been established within the Ministry of Education of the Government of Botswana in 1978 and the BNLP launched in 1980 (Roth, 1987). In planning the BNLP, the planners had made an excellent use of the experience in literacy work already available in Botswana (Botswana Extension College, 1978; Botswana Government, 1979). However, before committing assistance to BNLP, GTZ commissioned their own evaluation of what was on the ground (Roth and Etherington, 1981).
The evaluators were impressed with the fact that the BNLP had succeeded in establishing a functional infrastructure for program delivery and had conducted extensive training of field staff -- Literacy Assistants (LA's) and Literacy Group Leaders (LGL's). Methods and materials were seen as effective overall; and the program was viewed as meeting the needs and demands of the people.

On the debit side, the evaluators found insufficient top level commitment; little involvement of extension agencies in a literacy program that sought to teach functional economic and development skills to the participants; and high staff turnover at the top and at the middle levels of the program. To teach functional literacy skills, the report suggested two or three four-month teaching sessions instead of only one as planned by the project. Even on the basis of one four-month session as initially planned, the target of 50,000 a year was seen as unrealistic and unlikely to be met. The continued paucity of follow-up materials was also noted.

The evaluation recommended that GTZ should collaborate in the BNLP by providing technical assistance and suggested that evaluation remain a critical element in a program of this scope. The report recommended that a mid-term evaluation of the BNLP take place in late 1982, including DNFE staff members and experienced external consultants. The Project Memorandum signed later (Botswana Government, 1982), mandated such an evaluation; and the Education Planning Unit of the Ministry of Education initiated action on it in early 1982 (Kam, 1982).
It is interesting to note that important recommendations of the Roth-Etherington evaluation regarding the need for an articulation of the political commitment, improved coordination between BNLP and development extension agencies, and production of more follow-up reading materials were not systematically pursued.

THE 1983 INTERNAL EVALUATION: LOCAL OBJECTIVES, LOCAL CONTROL

The internal evaluation of 1983 received inputs both from GTZ and the German Foundation for International Development (DSE). The DSE would train local program officials, particularly the District Adult Education Officers (DAEO's) in evaluation techniques; and the DAEO's would then become the major instruments of implementing the internal evaluation. An international evaluation consultant, with experience in training and evaluation on Unesco and earlier DSE projects, was invited to provide the technical leadership in behalf of both GTZ and DSE. GTZ's local representative, the Literacy Coordinator of BNLP, would oversee the actual implementation of the evaluation exercise. The Planning Unit of the Ministry of Education would perform further watchdog functions.

There were no written terms of reference in regard to the evaluation exercise, about questions to be answered and the methods to be used in answering them. Until after the evaluation was almost complete, the evaluation team had got nothing from the GTZ but encouragement. The Evaluation Consultant, the DSE, the local representative of GTZ, and officials of the Ministry of Education were all agreed upon the evaluation approach.
Botswana Literacy Evaluations

The choice of the approach came from earlier evaluation experiences in the Third World and from the Zeitgeist of the early 1980s. Experimental and quasi-experimental approaches to evaluation had been seriously questioned during the 1970s. There had been talk of responsive evaluation (Stake, 1975), illuminative evaluation (Parlett and Dearden, 1978), evaluation as connoisseurship (Eisner, 1979), participatory evaluation (Hall, 1978), utilization-focussed evaluation (Patton, 1978), evaluation in the naturalistic mode (Guba and Lincoln, 1981), and evaluation as history (Cronbach, 1980). Evaluation practitioners had been advised to distinguish between the "context of command" and the "context of accommodation" as they chose evaluation methods. A paradigm shift was indeed in the process of taking place (Polkinghome, 1983; Reason and Rowan, 1981).

The focus of the evaluation team in Botswana, it was tacitly agreed, would not be on science but on sense-making. The normative objectives would not be objectivity, reliability and validity, but credibility and coherence. The team would not experiment through a stand-alone evaluation (Cronbach, 1980), but provide an experience that would bring to practitioners "the essential qualitative knowledge of what happened" (Campbell, 1979:71). They would be invited to look at their own program with a critical eye and search for causes, not culprits (Bhola, 1979, 1982). Only such an evaluation would have the best chances of being utilized later to make changes in program implementation (Struening and Brewer, 1983). Finally, the evaluation will seek to project multiple value positions, portraying interests not only of donors but of all stakeholders.
The methodological approach would be both eclectic and dialectical. The evaluation would use both good logic and sharpened perceptions; will tackle both feelings and facts; and thus be both quantitative and qualitative. Formal instruments such as inventories, questionnaires and interview schedules will be used but they will be both structured and unstructured; and these will have the possibility of becoming excuses for conversations with respondents, if field realities so required.

OPERATIONAL PLANNING OF THE EVALUATION EXERCISE

The evaluation was conceptualized not only as an internal evaluation but also as building a built-in evaluation system for providing continued organizational intelligence. The purpose was to make the total program system conscious of information needs to monitor inputs, processes, outputs and outcomes; and to establish a data collection, storage, retrieval and utilization system -- a Management Information System (MIS) -- commensurate with needs (Davis, 1974).

The preceding set of objectives required that local capacity be built through training. The Action Training Model already tested-in-use in Kenya was used (Bhola, 1983). The more than 15 DAEO's were targeted for such training. These DAEO's would be trained in the techniques of evaluation planning, design and implementation in a series of short evaluation workshops. They would, in turn, provide the necessary orientation to about 120 Literacy Assistants (LA's) in charge of various clusters in each district. The 3,000 or more Literacy Group Leaders (LGL's) would also be associated with the conduct of the evaluation
exercise. Every one of them later would participate in the development of the Management Information System.

An important decision was made about data flow from the field to the center in Gaborone. The principle enunciated was: Use before Dispatch! One who collects, collates or aggregates data must first use it to improve the program at one's own level before releasing it to the level above. The LGL's were, therefore, asked to collect and collate data at the level of the learning center, in tables especially provided, and learn about their centers themselves before sending data up to the LA's at the cluster level. The LA's would collate all data at the cluster level, in tables specially designed for the purpose, and write cluster reports on the basis of available data. They would, to the extent of their jurisdiction, act upon what they had learned from their reports. Then, they would send their reports along with supporting data to the DAEO's. The DAEO's would collate all data district-wise and write district reports. They too would act on their own reports, to the extent of their responsibilities, and then send their reports to the HQ in Gaborone. There a national report will be written and used in decision making at that level and in negotiations with other government departments and outside funding agencies.

THE IMPLEMENTATION OF THE EVALUATION EXERCISE

The dialectical approach continued during the implementation phase -- the dialectic between the ideal and the possible, between the standard and the satisficing, between technical rationality and social processes was sustained. The
evaluation became unabashedly multi-schematic and multi-paradigmatic (Polkinghorne, 1983:xi), synthesizing contradictions as they appeared. Norms were projected, but approximations were accepted as long as the process kept moving and participants did not get stuck (Schon, 1983). The sole methodological objective was to describe, as best as possible in the context, the scope and the meaning of the BNLP as it was being implemented.

A rather formal matrix was imposed on the evaluation exercise (B'ola, 1982, 1984c): the BNLP was analyzed as a system with various constituent subsystems; information needs of various subsystems were listed; outlines of a Management Information System were hammered out; an evaluation agenda relevant to the BNLP at that point in time was agreed upon; evaluation studies were designed in terms of the agenda; tools and instruments needed for data collection were prepared, translated and where possible pre-tested; field work was done; and data obtained was collated and computer-analyzed.

Within this formal matrix, however, there was tolerance for the approximation. Evaluation was being conducted, not within the context of control and command, but in the context of accommodation. The formal matrix had to have elasticity. The realities of lack of control, congruence and communication had to be faced.

The training inputs necessary for building a built-in evaluation system had to be in English. While these training inputs had been designed with meticulous care, the usefulness of
this training varied from one DAEO to another, depending upon their mastery of the language. There was also the constraint of training time. Decisions in regard to the information needs of the system, evaluation agendas and the elements of an MIS had to be made by the DAEO’s and accepted even if they seemed less than elegant and comprehensive to the outsiders.

All tools and instruments had to be designed by the DAEO’s individually or working in small groups. Faculty resources at the training workshops were adequate, yet there was a limit to how much quality control could be imposed and what kinds of revisions could be made. DAEO’s could not always translate the instruments they had constructed, nor did they always agree on the translations made by others. Setswana is a new subject in the school system, introduced in the post-Independence period and good translators are hard to find. Checks on the quality of translation by retranslation was not always possible and pre-testing was also not always done for lack of technical resources and constraints of time.

The training of LA’s as investigators had to be left to the DAEO’s and was not always done systematically or well. Dependable data on the scope of the current program was not available for a sampling frame to be devised, and only general decisions could be made about who should be interviewed and where.

Data collection could not be supervised in an evaluation that was conceptualized as an experience for the whole system. There were open-ended questions in each and every instrument. Some questions in the questionnaires and instruments did not
communicate and the investigators ended up using these instruments not as yardsticks, but as frames of reference for conducting conversations with their respondents. Data was recorded in Setswana and English and in some cases was translated from a language other than Setswana. Once available, this data had to be coded, again, back to English using themes and key words from the English language.

TRAINING FOR INTERNAL EVALUATION

The various stages of the process of building a built-in evaluation system, involving both training and action, are presented below:

Evaluation Workshop I (November 15-26, 1982)

Workshop I was conceived basically as a training workshop (2). It had two main objectives: (i) to learn the process of evaluation planning by doing evaluation planning; and (ii) to write proposals for evaluation studies on topics relevant to various districts, complete with objectives, designs, and drafts of instruments.

Evaluation planning was taught using the systems approach. The "evaluand," the BNLP, was analyzed as a system of overlapping subsystems: (i) policy and planning subsystem; (ii) administrative and instructional delivery subsystem; (iii) technical support subsystem; (iv) social mobilization subsystem; (v) curriculum and materials development subsystem; (vi) teaching learning subsystem; (vii) post-literacy subsystem; (viii) training subsystem; and (ix) evaluation subsystem (Bhola, 1984c). An ideal-type catalog of information needs of the various
Botswana Literacy Evaluations

Subsystems was developed and made the basis for developing a situation-specific evaluation agenda for the BNLP. This agenda was validated through the social process of developing a consensus among the DAEO's and the HQ staff. It could not be taken to any other constituency at any other level.

A distinction was made between the need for an MIS wherein program data routinely generated by the program could be stored for retrieval and utilization as and when appropriate; and evaluation studies conducted specially for meeting unanticipated information needs of the program. The new administrative patterns and role definitions necessitated by the built-in evaluation system were discussed as well.

In the second phase of Workshop I, participating DAEO's were asked to select an information need they had already experienced in their work in the district and to design an evaluation study that would generate the information required. They were assisted in the design of their evaluation studies, in selection of indicators, sampling procedures and in the preparation of tools and instruments. Plans were made for translation and pre-testing of instruments and for field work, before the DAEO's returned to work in their districts. They would come back to attend another workshop some 15 weeks later where they would bring their data for collation and report writing.

Evaluation Workshop II (March 7-18, 1983)

The data brought to Workshop II by the returning DAEO's was uneven both in quality and quantity. Some of the DAEO's,
back in their districts, had been unable to command the secretarial and transportation resources needed for the field work. Earlier aspirations were lowered in almost all cases, but all DAEO's came to Workshop II with some data in hand.

More importantly, they had all gone through their initiation as evaluators. They had all finalized their instruments in some form, had translated these instruments as best as they could and had administered them to samples of respondents. They had realized that respondents were not always accessible. They were frustrated by the realization that their questions were not always understood by their respondents and that they sometimes invited answers that were inappropriate or ununderstandable. They also understood the need of training their LA's if they were to be deployed as investigators.

These studies were based on rather limited data collected from a single district, and sometimes from a single cluster in a district, yet as the data were processed in tables or around themes, numerous significant insights began to emerge.

Findings from Training Exercises in Evaluation

A summary of the ten completed (3) studies brought to Workshop III for sharing with other participants should be of interest. These Individual Reports told us that the coverage of the program was far below the level of expectation as included in the NDP5. Common folks saw the program somehow promoting rural development even though only the 3R's were being taught and the teaching of functional skills was being neglected.

There was a lack of facilities and materials. Yet people
were hungry for knowledge and had high expectations from the program. They wanted to learn about farming, health, building crafts, small businesses, and some wanted to learn English. In one area, 60 per cent of learners wanted to use BNLP to go into further formal education and another 40 per cent wanted to use the program as a springboard for economic income-generating projects. Both these hopes seemed doomed to failure since no interfaces had been built between the formal and nonformal subsectors of education or between BNLP and the country’s development extension services. Indeed, some extension workers were completely unaware of the existence of the program; and some others who knew of it were uncooperative.

People were indeed learning to read and write. Some would not mind learning from a primer that would teach Setswana as a second language, but the fact that literacy was taught in Setswana from the same one primer to all language groups did not seem to pose any drastic problems. It was perhaps only slowing the process of learning and teaching but did not force dropouts.

Already people were beginning to use what they had learned by way of literacy and numeracy. However, the new learners were not engaging in any "praxis." Their learning thus far had neither increased their participation in democratic institutions nor increased their productivity.

The studies pointed to the need for sizeable amounts of post-literacy materials; greater inputs into the training and supervision of LGL’s who were under-educated, too young to handle social and technical issues included in the literacy primer,
often frustrated and almost always uncommitted. Specifically, one study discovered that LGL's with higher levels of qualifications performed less well (perhaps they were more frustrated and looking for an opportunity to jump ship and move to something else) than those with only primary education (for whom alternative economic opportunities were perhaps fewer, if at all). The studies also discovered important training and supervision needs of LA's.

These district reports identified the following urgent needs of the program: extension of coverage and increases in materials production; close cooperation with and from other extension services; and additional training, and better incentives to LGL's. They suggested also that more investigation of the following topics should be undertaken: Methods and content of training functionaries and of teaching adult learners; possibility of developing a network of institutions and persons who could be deployed for follow-up in teaching functional skills to learners; and improvement of management and decision-making for and within the BNLP.

Most of the findings fell within the range of expectations of the DAEO's and others working on the program and thus reinforced already existing knowledge. Some findings, however, went against conventional wisdom and were hotly contested; and the studies that had produced those findings were challenged by workshop participants on the basis of methodology used, selection of samples and design of instruments. It is clear from the perspective of early 1988 and with the benefit of hindsight that all the later findings from the many different evaluations may
not have added significantly to what these ten little, impressionistic, unscientific studies had made available. The echoes of the 1979 pilot project evaluation are also unmistakable.

**Evaluation Workshop III (May 9-20, 1983)**

Workshop III was designed to provide the transition from a training phase to implementation phase of the national built-in evaluation system. The workshop was focussed on the core objectives of (i) recollecting the list of information needs of BNLP developed at Workshop I; (ii) prioritizing those information needs as a group; (iii) developing agreement on data to constitute an M1S and on the formats for such data collection and storage; (iv) listing urgent information needs that must be fulfilled through specially designed evaluation studies; and (v) designing such evaluation studies, complete with tools and instruments for implementation at the national level. It was nothing short of amazing that all these tasks were completed at a satisficing level within the duration of the workshop.

**A Visit to the Field to Prepare for Implementation of the Evaluation in the Field (August 15-26, 1983)**

To ensure that things were happening as planned, the author returned to Botswana for a field visit some 12 weeks after Workshop III. All was not well on the ground! Getting satisfactory Setswana translations of tools and instruments had not been easy. Plans for the pre-testing of instruments fell through when the University of Botswana lecturer who had agreed to supervise the pre-testing left the country. The printing of instruments --
Botswana Literacy Evaluations

involving close to a 100,000 sheets of paper in all -- had strained the system to the limit. These instruments were waiting to be delivered to the various districts by truck which would take the driver more than two weeks on the road to make the full round.

Down at the level of districts, things were no better. The DAEO's had not always provided the necessary orientation to their LA's to prepare them for their role in the evaluation exercise. They had sometimes told them what to do, but not how to do it. Detailed schedules for field visits were nowhere to be found.

Indeed, the LA's were often anxious and sometimes even hostile to the idea of the evaluation exercise. Some of them suggested that what the evaluation exercise was trying to find was already known; and needed was implementation and not more evaluation. Others said that there was no scope for improving learner participation in the program in the midst of a drought when people were starving and had left their villages in search of food.

In response to the existing situation, the field visit got transformed into a series of 1-day workshops for LA's and their DAEO's in each of their district headquarters in the country, excepting two which were covered later. Using the data recently available from the national population census, the LA's were shown distributions of illiterates in their clusters and encouraged to recruit them into the BNLP and to serve their needs. The instruments to be used in the evaluation exercise were distributed to the LA's. The intentions of the various items in
those instruments were discussed and some basic procedures of data collection were presented. The sampling methods to be used in data collection were also discussed.

At the end of the field visit, it was not clear how the DAEO's and LA's will respond to the challenge of evaluation then before them. The situation seemed hopeful and hopeless by turns. To introduce some certainty into the situation a "fail-safe" strategy was devised. The HQ staff in Gaborone, under the leadership of the Literacy Coordinator, would conduct an evaluation-within-an-evaluation. As the national evaluation exercise was going on, they would work with a small national sample controlled from the HQ in Gaborone. It would be assured that data on this small sample would be collected and become available for analysis. If all else failed, they would have at least a stand-alone evaluation to fall back upon.

The Work in the Field, Impressive by any Means.

Following the field visit by the author, the Literacy Coordinator and his colleague at the HQ in Gaborone were out in the field most of the time during the data collection phase, going from district to district and from cluster to cluster. This may have turned things around. The field visit earlier during August 15-26, 1983 may have shaken things up a bit as well.

Whatever the causes, the consequences were most gratifying. During the 10 to 12 weeks period before mid-December 1983, 17,000 instruments had been completed and delivered: 7,000 dealing with learning needs of participants; 2,000 dealing with
the special needs of non-Setswana speakers; 1,600 on motivations of regular attenders; 1,150 dealing with those who had dropped out of the program; 3,000 listing uses to which literacy had been put by the new literates; and 1,500 village profiles describing what resources were available at the community level that could be used in providing services to the rural people.

Samples were in flux. Various items in the evaluation instruments were found ambiguous and, therefore, unusable. The instruments in the hands of many LGL's and LA's became frames of reference for conversations with respondents rather than instruments in the classical sense. Yet, there was lot of counting for the delineation of the scope of the program and lot of questioning in search of the meanings of the program. The evaluation exercise also became an instrument of mobilization for recruiting participants into the BNLP.

Seeing the big surge of data rolling in, the HQ in Gaborone did not work on the fail-safe plan of an evaluation-within-an-evaluation, but decided to buy a microcomputer for electronic data processing. To beat deadlines for report writing imposed by higher level decision makers at the GTZ headquarters, data was commandeered from the DAEO's and sometimes directly from LA's, before they had had the chance to process data at their levels and to write their reports as originally planned. Thus, the initial plans for data flow and information utilization were abandoned. The conceptualization of evaluation as experience was compromised somewhat because the product of evaluation (the report) was separated from the process of evaluation.
Evaluation Workshop IV (December 11-17, 1983)

The December 1983 workshop had initially been planned as a workshop for finalizing district level reports and for sharing the findings. The DAEO's were to write their reports using the same one standardized format to enable comparison and cumulation of results for the purposes of a national report. Now that there was to be electronic processing of data, and most data was already at the HQ in the process of being coded, the program of the workshop had to be changed to fit new realities. The DAEO's spent their time at the workshop developing "dummies" for their district reports, completing portions dealing with the ecological, economic, social and developmental context of their districts as well as in recording the human aspect of the evaluation exercise as they experienced it.

The Aftermath to Data Collection. An outside technician was brought in from abroad to help in the electronic data processing. Data was coded with the help of students from the University of Botswana. It may be recalled, that the evaluation instruments had not initially been designed for computer analysis. Coding schemes had to be imposed on the data after the fact. This was not a simple task. The task was further complicated by the fact that the foreign technician was denied direct access to data because of the language barrier. He had to depend on local coders and judge the quality of data indirectly from the questions these coders happened to raise. A report was written in 1984, a bit later than expected (Hundsdorfer, 1984).
AN EVALUATION OF THE INTERNAL EVALUATION

The consensus about the usefulness of the evaluation broke down even as data were being processed. The donor had perhaps expected an evaluation controlled by their resident expert and consultant. GTZ may have thought that local DAEO's would be trained as field investigators not as equal participants in the evaluation process. The attack from the GTZ office in Germany was essentially methodological. The donor found the participatory methodology to compromise objectivity. The omission of literacy and numeracy tests was found intolerable; and data actually collected was considered sub-standard.

Interestingly enough, everyone in Botswana directly or indirectly involved with the evaluation exercise was happy with the evaluation approach as well as with the results. There were several reasons for satisfaction.

As already indicated, some 17,000 questionnaires and interview schedules were completed as part of the evaluation exercise. The evaluation counted 28,800 learners enrolled in the program, ranging in age from 6 to 94, 31% males and 69% females. Some 65,000 learners had been covered during the life of the program which had graduated some 20,000 literates.

The DAEO's and LA's interviewed in the course of May 1984 writers' workshop (4) were most gratified with the evaluation training they had received which had made them better professionals all around.

All associated with the evaluation exercise had found the experience meaningful. They were glad for the opportunity to have been in the field, and to have interacted with the people
whose lives they had sought to change. Here and there, they had seen at first hand the consequences of their program actions.

The evaluation would have to be considered successful in regard to the most important criteria of all: The resulting understanding of functionaries of the BNLP showed much "improvement over previous understanding" (Polkinghorne, 1983:3). Both the scope and meaning of the program were clearly understood. They had discovered that motivations were not spontaneous and that mobilization was necessary for recruitment. They had developed a real feeling for the disadvantages from which the illiterate suffered even in "the back of the beyond" in the Kalahari desert. They had understood how literacy was indeed changing the patterns of leadership in local communities.

They had discovered that some of those they had been labeling as dropouts were really completers. These learners had left because the learning centers did not offer them much any more. On the other hand, some learners did not want to leave. The learning centers were fulfilling their special social needs. It was discovered that literacy classes in Botswana do not just last 12 weeks during the months of September to December but that some of these continue the year round.

The evaluation also discovered primary schools within literacy classes. In remote areas of Botswana where primary education had not reached, the literacy class had acquired a dual meaning: it was both a literacy class and a primary school.

In spite of all the frustrations of data collection, participants in the evaluation were quite satisfied with the
methodology used in the evaluation and with the findings. Neither their own experience, nor commonsense would challenge what they had discovered. The data compelled, but did not surprise. If the data could not be put to *inferential* uses, they certainly could be put to a multiplicity of *suggestive* uses in developing and modifying the program both in the long and the short run. While there may have been a few discordant notes here and there, the overall coherence of the data was remarkable. It fitted with reality. It made a lot of sense. Some things could be done with it (Cronbach, 1980; Guba and Lincoln, 1981). It not only met the truth test, it also seemed to meet the utility test (Weiss and Bucuvalas, 1980).

The participants in the evaluation process found the results usable even before reports had been written. Since the data and these many insight had personalized meanings for the LGL’s, LA’s and DAEO’s, the evaluation results were utilized in making program decisions even before any formal report came out.

The incidental returns on the evaluation exercise were many. First and foremost, the evaluation exercise led to an impressive social mobilization in behalf of the program. In many cases, the evaluation provided the first opportunity for DAEO’s and LA’s for a personal encounter with learners in the villages and cattle-posts. As a result, participation went from 18,000 to some 28,800. Institutional mobilization also resulted. The BNLP was able to establish networks with other government departments of education and extension for providing integrated services to adult learners at the field level.

There was further useful fallout! Planning and evaluation
are two sides of the same coin. Evaluation planning is the other side of program planning. In learning to describe the literacy program as a system in design terms for the purposes of evaluation, the DAEO’s developed useful insights in the planning process per se. The DAEO’s, after the evaluation exercise, were writing their routine monthly and quarterly reports with new insights. The reports were no longer merely descriptive but had become quite analytical. For the first time analyses at the learning group level and the cluster level had appeared in these periodical reports.

The morale of those working within the BNLP improved. Many LGL’s, LA’s and most DAEO’s came to own the evaluation exercise and to make references to it both in conversations and writing. There was an awareness of the need for professionalization in adult literacy planning and some LA’s later joined diploma and certificate courses in nonformal education and adult literacy under the department of correspondence education of the University of Botswana.

There was some fallout on other department of the Ministry of Education. The Correspondence Education Department of the Ministry was now anxious to train their officers in evaluation in the same mode preparing them to apply those skills to course evaluation and learner evaluation. There was also interest in curriculum evaluation and one of the later workshops for teachers engaged in curriculum evaluation used the project handbook, Evaluating Development Training Programs as text (Bhola, 1982).
People at the headquarters and in the Ministry were also satisfied. The Government of Botswana, Ministry of Education newsletter, Thuto (1983), wrote: "We ought perhaps to mention that the evaluation has been a very valuable source of information. As a result, we have much more information about the workings of the programme and if it becomes necessary to change it in certain ways, we can confidently take decisions that are in line with the findings of the evaluation.... The programme is already being modified as suggested by the evaluation."

Even though, the evaluation was rejected by the donors who accused their own resident representative of not having put it into the policy making system, there is evidence of use of the evaluation by the local decision makers. Many incremental improvements were made at the operational level. The NDP6 document acknowledges its debt to the evaluation when it says: "Following the experiences of the first years of the programme and recommendations made in the internal evaluation of 1983, a new strategy for the long-term eradication of illiteracy has been worked out." (Botswana Government, 1985: 158).

THE 1987 EXTERNAL EVALUATION: TO SERVE POLICY PURPOSES

As the end of GTZ grant period approached, GTZ was considering withdrawal from the BNLP. To make an "objective decision", GTZ ordered an evaluation. This will have to be an external evaluation, to be objective; and methodologically sound, to be dependable in decision-making. Early in 1986, the
Institute of Adult Education (IAE) of the University of Botswana was commissioned to conduct such an evaluation.

The evaluation document describes itself as an external evaluation, but it falls somewhat between the internal and the external. The evaluators included a native Batswana professional educator, a Tanzanian teaching at the University of Botswana and an expatriate from England who has spent many years in Botswana and is most familiar with the Botswana scene. The evaluators can be considered to be outside the institutional setting of the BNLP but they are not too far away from the Ministry of Education. In any case, the three evaluators worked in close collaboration of a Reference Group composed of various officials of the Ministry of Education and other officials of the Government of Botswana which provided advice, information and expertise during the process of information collection. The findings and recommendations were developed by the three evaluators independently of the Reference Group and is solely their responsibility.

The 1987 evaluation report (Gaborone, et al., 1987a), in reviewing earlier evaluations, characterized the 1983 internal evaluation as "an impressive attempt to utilize program staff to evaluate their own work and produce feedback of results which could lead to immediate operational changes....There is considerable evidence that the evaluation did lead to incremental changes within the BNLP's operation."

The 1983 internal evaluation was criticized, however, for never submitting clear cut conclusions and never properly reporting findings to the National Literacy Committee, thereby, formally
putting results into the policy-making channels of the government. The new 1987 evaluation report took note of the fact that GTZ had criticized the 1983 evaluation on methodological grounds and had disliked the participatory approach it had followed. GTZ had found it statistically weak and lacking in statistics on learner achievement obtained through testing. The MIS, the 1983 evaluation had worked on, was never institutionalized. Some of the data on computer tapes -- this writer learned for the first time -- had been lost during shipping back and forth between Germany and Botswana and, therefore, the promised detailed analyses of data had never been possible.

THE METHODOLOGY OF THE EXTERNAL EVALUATION

The methodology of the new evaluation involved a variety of data gathering techniques including documentary analysis; field observation of literacy classes in progress and attendance at training workshops for LA's and LGL's; and individual as well as group interviews, both structured and unstructured with DAEO's, LA's, LGL's and nine key informants in policy making positions. Questionnaires were used for a variety of data collection purposes: an "interview questionnaire" in Setswana administered by LA's to 845 literacy participants; a self administered questionnaire in English to LGL's (out of 1221 such questionnaires sent, 741 were returned); a self administered questionnaire in English to LA's (out of 131 such questionnaires sent, 73 were returned); and a self administered questionnaires in English administered to DAEO's (out of 20 such questionnaires sent, 14 were returned).
The evaluation included a literacy and numeracy test administered by LA's to 845 literacy participants. In-depth case studies were developed of two income-generating projects. All relevant statistics that already existed were analysed. Some photographic evidence was also used.

The sampling frame for learner testing and interviewing was developed in consultation with the Central Statistical Office and reflected three categories of learners-settings: urban areas, minority language rural areas and Setswana speaking rural areas. A random proportionate sample generated a list of 83 LGL's and 841 learners. Data analysis was handled by computer and a large number of tables so generated have been made part of the report.

RESULTS OF THE EXTERNAL EVALUATION

The evaluators could not find any reliable data on literacy rates in the country or demographic data on target group for the BNLP by way of developing a context for their own evaluation. Within the BNLP there was no data available to distinguish new learners from old ones or to indicate the length of stay within the BNLP for various learners.

By the end of 1986, the BNLP had had a cumulative enrolment of 178,000 -- a substantial achievement by any standards. The BNLP had been the "largest sustained adult education program since independence."

Literacy tests revealed a high level of performance: 81 per cent of those tested achieved a score of 40% or more which can be equated with passing the Standard Four attainment test.
How long it takes a person to learn to read and write was not possible to determine, however. Non-Setswana speakers were not negatively affected as literacy learners.

The evaluation indicated that distribution problems within the BNLP were significant; teaching content and methods both needed review; and learner expectations from the program were further education and training for employment both of which needed to be better reflected in the program.

There was the need for a more comprehensive policy on post-literacy. The BNLP needed to build interfaces with multiple points of entry between BNLP and formal education envisaged in the NDP6. There was urgent need for developing a special program that would be equivalent to the Primary School Learning Examination. The needs for learning English expressed by many also needed to be met.

The interface between BNLP and development extension also envisaged in the NDP6 needed to be made operational. The DNFE should play the mobilizational and organizational role but then the relevant extension departments should take over the task. The DNFE/BNLP should produce sufficient amounts of follow-up reading materials, promote rural newspapers and establish village libraries.

In terms of administration and management of the program, the evaluation proposed greater interface between the National Literacy Committee (NLC) and the Rural Extension Coordination Committee (RECC) at the center; and between NLC and District Extension Committees (DET's) and Village Extension Committees.
Botswana Literacy Evaluations

(VET’s) in the field areas. A new organizational structure was proposed for DNFE itself that would clarify headquarter and field staff relationships and permit greater operational decentralization. The needs of staff training and schemes of service were also clarified. It was recommended that BNLP pay special attention to the installation of a "revised" MIS for use in day-to-day decision-making.

Finally, to demonstrate national commitment to literacy and to claim ownership of BNLP, the government should increase its funding commitment. The external evaluation also recommended internal evaluations of instructional materials and staff training programs.

A Self-Evaluation of the External Evaluation of 1987

In an honest and incisive self-evaluation of the external evaluation of 1987, the authors of the report write: "It should be noted that many of the problems identified (such as the need for DNFE to have a research and evaluation capacity and the inadequate post-literacy activities) have been referred to in many earlier documents on the BNLP. Similarly, many of our recommendations are not new but echo previous suggestions. We therefore conclude that, in the final analysis, the significance of an evaluation report such as this lies less in the validity of its findings and the strength of its arguments than in its timeliness and its insertion into the policy making process."

(Gaborone, et al., 1987a:5).

The report seems to have served the policy making objectives of both GTZ and the Government of Botswana. GTZ has
since agreed to continue support of BNLP, but it may have used "objective data" from the "external evaluation" to exact some promises from the Government of Botswana in regard to funding and day-to-day operations. Already GTZ has made two inputs of its own at the operational level as evidenced by proposals for a reorganization of the DNFE (Beyer, 1987) and the introduction of more logical methods of planning literacy actions (Roth, 1987).

AN OVERVIEW OF EVALUATIONS OF BNLP

What are the lessons to be learned from an overview of the evaluations of BNLP?

1. Evaluation, especially internal evaluation, is an important educational experience insofar as it can make the calculus of means and ends of a program transparent for program implementers. Internal evaluating should indeed be a continuous part of all program planning and implementation. However, there may come a point when preoccupation with evaluation may absorb resources needed for implementation and when evaluation may end up being no more than a strategy of postponement. Clearly, this should not be allowed to happen. At this point in BNLP, it is time to move vigorously towards implementation.

2. Evaluation will always be a mix of the professional (the desire to improve) and the political (the desire to control means and ends). Evaluation will never be fully exorcised of politics, nor perhaps, it should be. However, the political-distributive implications of evaluation should be clarified and the worst encroachments of politics resisted through discussion at the front
end. Consensus about appropriate terms of reference and about methods and strategies of implementation should be attempted, even though a breakdown of consensus through changes in characters and historical time can never be foreseen.

3. Special attention should be paid to linking evaluation results with the policy making processes. This means that timeliness and communicability of the evaluation findings are of crucial importance. It is also important to insert the evaluation findings formally into policy making structures.

4. Internal evaluations seem to serve better the interests of program planners and the objectives of program improvement. Internal evaluations seek to keep program control with those responsible for program implementation and sometimes with the beneficiaries of programs. External evaluations seem to serve better the interests of policy makers and the objectives of resource allocations between and among various programs. The basic intent of external evaluations is to objectify decisions regarding reallocation of resources, though the language of justification is always of professionalism and program improvement.

5. Internal evaluations have greater affinity and tolerance for naturalistic methods. On the other hand, external evaluations typically prefer the so-called rationalistic methods, to create an aura of "objectivity and reasonableness" for the reallocative funding decisions to follow.

6. The experience with internal evaluation in Botswana demonstrated the usefulness of the Action Training Model -- encompassing a series of workshops to provide training to program officials in evaluation techniques as they took part in
conducting evaluations. It also proved the tenability of training "barefoot evaluators" in non-academic settings in the Third World. 7. The evaluation overview also seems to suggest the need for the triangulation of evaluation approaches within an overall evaluation plan: Management Information Systems to monitor programs on a continuous basis; naturalistic evaluations conducted internally by program officials to discover the meanings of their actions; and more formalistic evaluations to make comparisons in those few cases that fit into the context of command.
NOTES

1. Contributions are acknowledged from Dr. Josef Muller of DSE; Dr. Volkhard Hundsdorfer, GTZ-representative and Literacy Coordinator of BNLP; Dr. Ulla Kann, SIDA-sponsored Planning Officer in the Ministry of Education; and various officials of the Government of Botswana in the Ministry of Education. Acknowledgements are also made to Dr. Lars Mahlck, International Institute for Educational Planning, Paris; Dr. Ash Hartwell, Unesco Education Planning Adviser, Maseru, Lesotho; Dr. Peter Higgs, Unesco Specialist in Literacy, Lilongwe, Malawi; Ms. Elvyn J. Dube of the Institute of Adult Education, University of Botswana, Gaborone; and Dr. Linda Ziegahn, USAID Researcher, Lesotho Distance Teaching Center, Maseru, Lesotho. Dr. Volkhard Hundsdorfer as Literact Coordinator in the Department of Nonformal Education, Ministry of Education was responsible for all local arrangements in connection with the series of training workshops; and was the officer in charge of the implementation of the evaluation in all its aspects. Dr. Rainer Hampel, a GTZ consultant from West Germany helped with electronic processing of data during the latest phase of the evaluation.

2. Evaluation Workshop I (November 15-26, 1982) was organized in collaboration with the International Institute for Educational Planning to support the Institute’s project: Research and Training Project on Evaluation and Monitoring of Educational Reform Programs in Africa. Two teams of four evaluators each came to join the workshop from Lesotho and Malawi. The March 1983 workshop was also attended by teams from Lesotho and Malawi. The May 1983 workshop received a team from Malawi but not from Lesotho.
3. This summary was prepared by Dr. Volkhard Hundsdorfer, and included these studies: Attendance patterns of learners and reasons for absences and dropouts, by T. Chebani; Learning needs of adult learners following different occupations, by Mothuseng Mathwanye; Learning needs of the newly-literate as defined by different stakeholders, by Mothusi George; Administrative problems in the delivery of the program as experienced by different functionaries, by Z. Kwapa; Problems of learners with mother tongue other than the language of literacy, that is, Setswana, by Reginald Mathangwane; Differences in the performance of LGL's with different educational backgrounds and attitudes, by Ezra Mogwe; An audience survey of listeners of radio programs broadcast by the BNLP, by Stephen Mojela; How is the BNLP affecting the "small" man in Botswana, by Nnagolo Tau; Are LA's retaining and using the social and technical skills taught to them as part of their training courses?, by Ted Thebenala; and How are literacy programs affected by the total cultural ecology of communities where it is offered?, by Dwight Thipe.

4. The author was in Botswana, again, during August 13-24, 1984; and had the opportunity of administering questionnaires dealing with the usefulness of the evaluation exercise and the effectiveness of training for the evaluation exercise. While the sample was small -- about half of the DAEO's in the country and no more than half a dozen LA's out of a possible 125 -- there were some useful insights that became available.
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