

CLASSIFICATION
 PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE Low Cost Building Materials Production			2. PROJECT NUMBER 632-0089	3. MISSION/AID/W OFFICE USATD/Lesotho
6. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 632-80-1	
A. First PRO-AG or Enjoinder FY 77	B. Final Obligation Expected FY 80	C. Final Input Delivery FY 80	<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION 7. PERIOD COVERED BY EVALUATION From (month/yr.) 2/78 To (month/yr.) 11/79 Date of Evaluation Review November 5, 1979	
5. ESTIMATED PROJECT FUNDING			8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR	
A. Total \$ 1,027,000				
B. U.S. \$ 540,000				

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)

B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
LEHCO-OP	Dec 31, 1979
LEHCO-OP, PS FCH	Feb 29, 1980
GOL, LEHCO-OP, PS	April 30, 1980
GOL, LEHCO-OP FCH, PS, LEHCO-OP	April 30, 1980 Dec. 31, 1979
FCH, ATD	Dec. 31, 1979
FCH, AID	Dec. 31, 1979

Recommendations and Issues for Action

- The PS Manager (counterpart) and the Production Manager (counterpart) must be appointed expeditiously. (p. 3)
- The relationship between PS and LEHCO-OP guaranteeing the financial integrity and independence of PS must be defined. This has to include procedures for utilization of profits. (p. 4)
- Alternative solutions to PS's organizational problems should be considered. Some options include: (a) that PS be spun off from LEHCO-OP as an autonomous parastatal Building Materials Production Center (b) The formation of a worker's owned Production Cooperative. (c) Status Quo maintained (contingent upon the resolution of Point 2 above).
- If PS remains a subsidiary of LEHCO-OP, the legal status of LEHCO-OP must be defined and future economic resources needed to maintain its operations clearly established and sources of funding identified. (P. 4)
- Priorities of project goals ought to be defined in cases where there may be conflicts between objectives. (P. 11).
- The FCH resident technician should be relieved of formal responsibility for training of LEHCO-OP staff since CTDA now has a direct relationship with LEHCO-OP. (P. 2).
- Thought should be given to assigning someone such as a Peace Corps volunteer to supplement the OJT activities of PS. (P. 3)

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A. Continue Project Without Change

B. Change Project Design and/or
 Change Implementation Plan

C. Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

Larry Sayers, Economist, USATD/Swaziland
 Hector Garcia, FCH Consultant
 Larry Marchese, FCH Project Advisor
 Steve Norton, Project Manager, USATD/Lesotho

12. Mission/AID/W Office Director Approval

Signature: *F. Correl*

Typed Name: Frank D. Correl, Director

Date: 11-5-79

BEST AVAILABLE DOCUMENT

13. Summary

The Low Cost Building Materials Production Project, 632-0089 has succeeded in turning a building materials production unit from one on the brink of financial collapse to one making joinery products and cement blocks profitably within a span of 18 months. Expanded production facilities have been constructed, equipped and put into operation within the cost and time frame contemplated.

Sales targets for the end of project have already been exceeded by a factor of two. The quality of the materials produced is high, meeting specifications of donor financed projects. These materials are sold at prices below those of comparable alternatives. Outputs, particularly of cement blocks, are being used in low cost housing, both through sales to the CIDA supported scheme and to private individuals constructing their homes in stages.

Thus, the project already appears to be largely meeting its purpose and goals: (1) to reduce building materials costs and reliance on imported materials; (2) to facilitate improvement of housing for the poorest majority and (3) to increase employment and income in the building materials industry.

There are, however, two problem areas that must receive close attention if the gains made are not to be ephemeral. The project technicians must have counterparts assigned to them to develop the managerial expertise necessary to help Production Systems (PS, the subsidiary of the Low Income Housing Company, LEHCO-OP, which this project supports) keep operating profitably after the technical assistance is withdrawn. In addition, the organizational and financial relationship between PS and its parent organization, LEHCO-OP must be clearly established and the objectives of PS well-defined and understood. If adequate resolution of these issues is forthcoming, the chances are excellent that the project will successfully meet its purpose and goals.

14. Evaluation Methodology

This evaluation has been a team effort by Mr. Larry Sainers of USAID/Swaziland and Mr. Hector D. Garcia, FCH consultant. Prior to the engagement of this assignment, Mr. Garcia was briefed by Mr. Jack Edmondson and on his arrival in Washington by Mr. Dick Owens, both Vice Presidents of FCH. In Washington, he was able to review progress reports, correspondence, OPG project papers and other related documents such as reports of various short-term consultant visits.

On arrival in Maseru, both members of the team, accompanied by Mr. Larry Marchese, FCH Advisor, were briefed by Mr. Steve Norton, USAID/Lesotho Project Manager and contact officer for the evaluation. During this initial visit, the evaluation team received guidance as to evaluation procedure and format to be used (PES Form AID 1330-15 and 1330-15A and B) and some specific amplification of the PES for this evaluation.

The evaluation was conducted primarily in PS facilities where installations were visited and operations observed. Financial records were reviewed and discussions were held with key personnel; Mr. Vincent Makhele, General Manager of LEHCO-OP, Mr. Richard Beardmore, CIDA Project Manager, Mr. Gabriel Mphakalasi the appointed Manager of PS and Deputy Director of LEHCO-OP, and Mr. Henrique Nyankale, the Management Trainee.

These visits were enhanced by extensive discussion with the FCH Advisor and his ODM colleague, Mr. Michael Bevis, the technical advisor for operations to clarify some matters and verify or confirm others.

15. External Factors

Changes in Policy: The original purpose of LEHCO-OP was to create a technical service organization (TSO) to provide services in architecture and planning, site selection and development and supervision of a 'pilot' self-help construction project. This organization, in turn, created the Mohalalitoe Housing Cooperative to provide home ownership to nearly 200 low income families. It also created Production Systems (PS) as a subsidiary of LEHCO-OP to manufacture construction materials to be used in the construction of cooperative housing.

Difficulties with the original Housing Cooperative and a financial crisis that almost caused the collapse of LEHCO-OP have led to a change in its role to that of an administrative and management agency of low income housing projects financed by foreign donors, such as the \$2.6 million Canadian International Development Agency (CIDA) Project. Since LEHCO-OP's role has changed and its activities will most likely always be associated with donor projects, the PS project should drop its training of LEHCO-OP management responsibility, leaving this to involved donors, and should review its financial and perhaps organizational relationship to LEHCO-OP.

Lack of Skilled or Semi-Skilled Manpower: Production Systems is having difficulties recruiting skilled or semi-skilled manpower. Presently, they have six vacancies for qualified joiners but none are

available to employ. In the past, PS has tried to hire skilled personnel but it has always found that on-the-job training (OJT) to upgrade skills and impart the concept of teamwork has been necessary. Skilled manpower was an output assumption in the logical framework. The lack of adequately trained employees is hampering other managerial and organizational tasks because of the time required for OJT. Thought should be given to employing a PCV or similar person to supplement the current OJT program, and allow the technicians more time to carry out their management training tasks.

Lack of Availability of Managerial Talent: Another external factor that has affected PS's operations has been the non-availability of supervisory personnel. (The logical framework contained an output assumption that a facility manager would be available locally). This situation has forced the FCH technician to manage the PS operations. Recently, a management trainee has been assigned to PS in the hopes that he can be trained as manager and eventually take over the responsibilities for the management of PS. It is not, however, clear that this management trainee will in fact be named as manager/ counterpart. LEHCO-OP has also assigned its Deputy General Manager/ Controller as manager of PS. But the time involved in his other duties precludes an active managerial role on his part. This confusing situation must be clarified immediately if PS is to become a free standing organization.

De-Capitalization of PS: The difficulties experienced by LEHCO-OP which involved it in a serious financial crisis affected PS operations unfavorably. The parent organization was not able to reimburse PS for goods delivered for low income housing construction. This action depleted the operating capital available to PS.

Only through the ingenuity of the FCH Advisor, who won some bids on special joinery jobs and obtained a 50 percent advance of the sale price to purchase raw materials and pay salaries, was PS able to survive the crisis. PS is still saddled with approximately R100,000 in bank debts which will have to be repaid because there is little likelihood that LEHCO-OP will reimburse PS for the goods delivered. Moreover, LEHCO-OP used approximately R25,000 of PS operating capital for its own operating expenses and has not returned this to PS. Since then, LEHCO-OP has agreed not to utilize PS operating capital for LEHCO-OP purposes, but there needs to be a clearly defined financial and organizational relationship between PS and LEHCO-OP.

This, in turn, will require that LEHCO-OP's long-term financial situation be resolved. For FY80/81, LEHCO-OP's yearly recurrent budget will be R160,000. It will receive R113,000 as GOL contribution

to the CIDA low income housing project, approximately R45,000 from home buyers' fees, and a small amount from the sale of such things as transport services. The GOL contribution is directly related to the CIDA project. If that project ceased to exist, LEHCO-OP would not necessarily receive the Government subvention. The OPG proposal suggests that PS should become sufficiently profitable to finance LEHCO-OP's operations, but the PS operation cannot generate sufficient profits in the foreseeable future to fulfill this proposition. Thus, the source of LEHCO-OP funding must be resolved satisfactorily with the GOL if a possible future raid on PS capital is to be avoided.

16. Inputs

AID-Financed Inputs: The AID-financed inputs (\$325,000) provided under the original proposal are being made in a timely, and for the most part, effective manner. The commodity and construction inputs (\$75,000) are completed. A \$10,000 input for training and new product development has not been drawn down to date because these activities are being implemented through normal operations. There are plans to use the funds to purchase audio-visual and other training aids.

Technical assistance (\$240,000) is proceeding apace. This input is composed of the services of an FCH Advisor for a 30-month period and eight (8) man-months of short-term technical assistance. The resident technician, Mr. Lawrence Marchese, has been providing technical assistance to the project since February, 1978. The following consultants have also provided assistance:

Ms. Ruth Senior, Manpower Training, five weeks
Mr. Arthur Boyd, Marketing, a total of six weeks in two visits
Mr. Hector D. Garcia, Evaluation, two weeks

Other short-term technical assistance anticipated in the proposal (p. 32) included specialists in the following areas:

- (1) plant layout and design
- (2) production management, including cost and quality control system
- (3) development and design of new products
- (4) the use of replenishable resources for building materials

Assistance in the first and third areas was achieved internally. Production management expertise is partially available in-house, but

an accounting and finance consultant to assist in developing appropriate management and cost control systems will likely be requested during early CY 1980.

Because LEHCO-OP has delayed the appointment of a manager/counterpart and because LEHCO-OP's financial crisis depleted PS's working capital, it was decided to amend the OPG (\$215,000) to extend the services of the FCH Advisor by one year to enhance the probability of having a manager/counterpart trained and to provide PS with necessary working capital. In addition, the amendment provides for the acquisition of a seven-ton truck, capital improvements, new product development and six more man-months of short-term technical assistance.

"GOL" and Other Donor Inputs: While the proposal referred to GOL inputs, these, in fact, were all provided internally within the LEHCO-OP organization. The intended inputs have already been made, but LEHCO-OP appears to be somewhat concerned that none of these inputs were actually provided by the GOL. LEHCO-OP would have liked to receive a direct GOL subvention for its participation in the project as it does for the CIDA project. Since PS has subsidized LEHCO-OP in the past (see External Factors) and since it currently pays for all services rendered to it by LEHCO-OP, there is no need for direct GOL support. This concern of LEHCO-OP is directly related to the problems of financing its overall operation (see External Factors).

LEHCO-OP management has also raised some objection to the way that the OPG funds are disbursed for PS operations. There is an FCH account in the Bank of Lesotho into which funds are deposited. The FCH technician controls these funds without the counter-signature of the general manager of LEHCO-OP. Thus, LEHCO-OP feels, that it is not really in control of capital inputs into PS operations. All other PS transactions do require a counter-signature. This is a temporary problem since all FCH direct financial inputs into PS will soon be completed but it again points up the sensitive nature of the PS/LEHCO-OP relationship when it comes to financial matters.

The production manager/advisor originally provided through SWS has extended for two years through ODM. This input is proved very satisfactory.

Conclusion: In general, project inputs are being made in a timely and effective fashion. The one area that may present problems in the future is in managerial training discussed earlier.

7. Outputs

The project output contained in the logical framework is a building materials production facility employing 90 people to

provide building blocks, window and door frames and furniture for low cost and self-help housing projects and the building materials market in general". Implied outputs gleaned from the proposal include: (a) financial, management and production systems devised for PS (p. 31); (b) market studies prepared (p. 31); (c) financial and management staff of LEHCO-OP and PS trained and in place (p. 31); (d) new product lines developed (p. 32); (e) institutionalized on-the-job training program for production staff in place (p. 22); (f) production staff in place (p. 7); (g) profit sharing scheme in place (p. 7).

The magnitude of outputs contained in the logical framework include: "(1) joinery unit production value per annum of \$80,000, (2) concrete products unit production value of \$65,000, and (3) training program established". While the value of yearly production is not properly an output indicator in this project, the value of output of PS operations during the six months' period (April - September 30, 1979) surpassed these yearly "output targets". This is a clear indication that the facilities are adequate and that production staff have been trained (implied output (f)).

No magnitude of time frame was attached to the establishment of training programs, but as discussed under External Factors section, more attention to institutionalizing the on-the-job training program and a clarification of the management counterparts' situation must be forthcoming soon to enable the implied outputs (c) and (e) to be achieved. Progress towards achieving implied output (a) - the financial, management and production systems for PS - is being made in practice, but again these systems need some formalization. (Anticipated short-term T.A. will help in this regard).

The marketing study output (implied output (b)) has been largely achieved. The development of new product line output (implied output (d)) has been largely achieved. What remains to be done here is to test market acceptability of the lines and an efficient assembly routine established for those lines found acceptable. It should be noted here that the product lines currently developed are not geared to the low income homeowner. Given the extremely low cost of mass produced low income household furnishings emanating from the RSA, the choice to postpone this area in the early stages of the project was probably a wise one.

Finally, the profit sharing scheme implied output (f) has not been achieved but with the help of short-term T.A. early in CY 80, this output should be achieved in a timely fashion.

To summarize, it would appear that satisfactory progress is being made toward achieving the explicit and implicit project

outputs with the exception of having training programs in place and having the management staff of PS trained and in place.

The lack of progress in developing the trained staff is directly related to the invalid explicit output assumption that "facility managers and skilled labor force will be available locally". The lack of skilled manpower and the inherited financial crisis has forced PS into programs to get the production staff at least minimally productive in order to keep production operations from shutting down. The lack of appropriate potential managers from which to choose counterparts has meant delays in identifying counterparts.

18. Purpose

The project purpose is "to strengthen and consolidate LEHCO-OP's capacity to produce and distribute locally manufactured and fabricated building components and accordingly reduce the dependency in the building and housing sectors on South African imports" (p.1). From the logical framework the EOPS condition is "materials used in self-help and low cost housing construction and improvement programs are supplied primarily from local production". This condition largely exists already for projects within the Maseru market area for concrete blocks. The EOPS as stated will certainly be achieved; however, for such a condition to continue after the project is completed, the problem areas already discussed will need to receive adequate attention. The two changes that have led to the significantly expanded output of PS are the expanded facilities which will remain and the aggressiveness of the two "advisors" who have upgraded the quality of output and pushed hard to obtain a market. This managerial aggressiveness will need to be maintained if quality of output and markets are to be maintained.

19. Goal

The goal of the project is: "... (1) to reduce building materials costs and reliance on imported materials; (2) to facilitate improvement in housing for the poorest majority and, (3) to increase employment and income in the building materials and construction industry."

For items (1) and (2) no quantifiable measures of goal achievement are established but it is clear that there has already been some impact in both areas. PS is too small to affect significantly the importation of finished building materials in the short run, but it has already won a few sizeable (for PS) contracts for joinery products that otherwise would have most likely gone to RSA firms. In facilitating housing improvements for the poorest majority, PS is producing and selling profitably concrete blocks of a quality acceptable for donor projects at

10-15 percent below alternative sources of supply of similar quality. On the smallest houses, this represents a R25 to R50 saving in housing costs. Moreover, 80 percent of sales have gone to low income housing projects and sales to individuals building their own houses and buying blocks in units of 50-200, as money is available. On the employment generation goal, PS currently employs 47 persons and hopes to reach a plateau of 60 work places and not the 90 originally programmed. This latter figure is unrealistic because it was apparently based on an output/labor ratio existing at the time of proposal development but PS was seriously overstaffed at that time. However, it is expected that as PS solves its organizational problems and consolidates its operational gains it can continue to expand and create additional jobs.

20. Beneficiaries

The direct beneficiaries include the 47 employees of PS who have greater job security and higher wages, the 71 home buyers in the first phase of the CIDA financed low cost housing scheme and the estimated 200 (per year) low income families who are purchasing concrete blocks piecemeal to construct their own housing. Their benefits arise primarily because of savings of from R25 to R50 in building costs for low income houses. This represents a savings of three to five percent per house.

The number of beneficiaries will, of course, increase yearly as new low cost housing schemes begin, as new individuals begin construction of their own houses, and perhaps as PS is able to develop joinery products appropriate for low income families. At current production levels and percentage of sales for low income housing, the PS concrete block operations are sufficient to construct perhaps 600 low income houses per year.

21. Unplanned Effects - Not pertinent at this time.

22. Lessons Learned

1. The demand for building materials does exist and can be supplied locally. The project has demonstrated this beyond a doubt. It is highly unlikely that the building materials market is unique in this respect in Lesotho or in other Southern Africa countries. With PS investment costs of well under \$5,000 per job created, similar small scale enterprises offer significant employment prospects even with Lesotho's limited availability of capital.

2. The lack of skilled manpower is critical. The workers

available to PS did not have the skills adequate to allow them to operate effectively without further on-the-job training. Even with this training, productivity is not high. Managerial talent is equally elusive. To minimize start up problems, projects of this nature should anticipate the need for intensified training courses of a few months followed by an additional few months of production training in the actual facilities. During this period, production for profit should not be considered. The financial implications of such an approach need to be fully calculated and project budgets developed accordingly.

3. The financial situation of potential recipient organizations must be clearly known beforehand. A more detailed look at LEHCO-OP's potential financial viability during proposal development may have provided an indication of financial problems that arose within a relatively short period. Since many organizations that such projects could support will have the same shaky financial underpinnings, a good financial analysis should be imperative in projects of this sort.

4. Regarding possible follow-up employment generation activities, any large scale activities pertaining to the development of small scale enterprises should give priority attention to skills training and entrepreneurship. Employment generation projects organized in a way similar to the current one probably do not maximize the use of expensive technical assistance. A central management unit providing business management assistance to a large number of small enterprises would be a more efficient way to achieve the objective.

23. Special Comments - Project Design Weaknesses/Possible Improvements

The logical framework could clearly be upgraded and contain increased quantification. Various components needed for a functioning facility need to be spelled out. Possible conflicts at the goals and purposes levels could be more clearly pointed out and priorities established. The best example of this is the potential conflict between maximizing outputs and profit and maximizing the impact on the low income housing market. In consolidating its financial situation, PS has devoted its joinery efforts to developing and producing specialty items unrelated to low income housing needs. This has resulted in greater financial availability but has been achieved at the expense of maximizing project impact on low income people. This and other tradeoffs at the goal/purpose level should be analyzed with an eye to developing either a more sharply defined goal or to establishing the priority of the goals.