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COOPEP PROJECT (0169/9) FINAL EVALUATION

Mission Evaluation  
USAID/Haiti  
DRE/EVAL & OEA  
February 13, 1985

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## I. EXECUTIVE SUMMARY

### Summary of Findings

This Mission-conducted evaluation is in conformance with the project evaluation plan and was carried out to assess progress toward the achievement of project targets and make appropriate recommendations to Mission management with respect to project continuation.

From an institutional standpoint, COOPEP has made great strides during the 18-month Life-of-Project period. Starting out with 20 members, COOPEP's actual membership roster stands at 34, with 7 applicants undergoing processing for admission. Therefore, the EOPS target of doubling the membership by the April 85 PACD should be easily achieved. In fact, the CLUSA technical expert estimates that total membership will reach 50 by the PACD, if the current application trend continues (p. 8).

The current composition of the membership is also encouraging. During the initial period after its formation (1981), the influence of the few big producers was so preponderant that COOPEP was perceived as a rich men's club. As a result of Mission encouragement, the admission production criterion was substantially scaled down by 75% (from 6,000 to 1,500 live birds a year production level) to attract more small producers. As a consequence, the influence of the big producers has been considerably reduced and today, COOPEP can be characterized as a cooperative of medium and small producers, with a production rate averaging between 24,000 to 50,000 live birds a year. In terms of percentage, small members constitute about 71% of COOPEP's total membership (see Part III, Section B3). Also of critical importance is the fact that COOPEP is evolving into a true cooperative organization. All poultry growers or producers surveyed underscored the importance of the one-man-one-vote and majority rule democratic principles, regardless of one's productive capacity or the number of investment snares one possesses in the cooperative. To further consolidate and intensify the cooperative process, it is recommended that more committees be established to allow the small growers wider decision-making experience, on a day-to-day basis, instead of concentrating all oversight functions in the hands of the Comité de Surveillance (see Part III, Section A2). Establishing relations with other successful coops and coop-type groups (e.g., CCH and groupements) would also be useful so that COOPEP members can see other coop members in action (p. 8).

Following cooperative tradition in Haiti, COOPEP provides a number of important services to its membership. A key service is the provision of much needed credit to small and medium producers each growing cycle. Up to \$5,000 are made available to eligible producers to buy chicks, feed and other supplies at a 15% per annum interest rate. COOPEP also greatly facilitates logistical aspects of operations for members by ordering and delivering feed, medication and other supplies, as well as renting feeding bins and automatic drinking systems, on an income-graduated scale. Also, COOPEP offers members a profit-sharing plan by redistributing discounts extended through bulk buying of feed, medication and other supplies, and equipment. Perhaps the most

critical service COOPEP provides its members is in the area of technical assistance. The CLUSA expert and COOPEP's Grow-out Manager are constantly visiting members' farms to observe and monitor operations, record vital statistics and provide on-the-spot assistance in correcting problems. Because of the technical assistance, members were able to lower the mortality rate of their broilers from 8% to a range of 3.09% to 4.6%, representing a decrease of approximately 50%, for growers in all three production categories, for the period April through August 84, a projected saving of 40,000 broilers per year. According to COOPEP records, the performance of 12 small and medium growers is more encouraging still for the first quarter of FY 85, recording a mortality rate of only 2.80% (pp. 12-13).

Technical assistance was also instrumental in lowering the conversion ratio for one pound feed to one pound broiler. Project records for twelve small producers during the last nine months indicate that it dropped from 2.9:1 to 2.3-2.5:1, a saving of at least 0.4 lbs. of feed per pound of weight gain or 1.2 lbs. per average mature bird (3 lbs.). The improved feed conversion ratio generated savings of \$188,000 to \$235,000 for the 800,000 to 1 million broilers sold per year (pp. 12-13).

Savings made as a result of the decreased mortality rate and the improved feed conversion ratio have led to increased production. Improvements occurred primarily at the small farm level, where the number of flocks have doubled per year, in certain cases. Production increase at the big farm level, though less significant, is estimated to have increased by 18%. Small farmers therefore have benefited from increased net cash income, as a result. Annual benefits from improvements in farm management practices for the seven small producers surveyed are estimated to be in the neighborhood of \$17,301, and it is estimated that small producers in general have increased their net income by \$14,308 in annual revenues, on the conservative assumption that they have increased their production by one flock a year (p.14).

COOPEP's financial performance has been generally positive, earning slight surpluses during the first 26-month operating period, since the creation of the coop through March 1984. Income came primarily from the sale of frozen and live chickens, feed sales rebates and an Inter-American Foundation grant of \$25,800. Since March, the coop's two largest poultry growers have been purchasing feed directly from SONUAN, instead of going through the cooperative, in order to receive the entire rebate from SONUAN without the deduction for COOPEP operating expenses. As a result, COOPEP's rebate income dropped by more than 75%. Thus, project records for the period October 83 - September 84 showed a loss of about \$3,500 (\$131,654.85 in earnings and \$135,145.44 in expenses). The financial picture considerably brightened for the first quarter of FY 85, with COOPEP registering a surplus of \$14,892.62 for October through December 84; last year's figures for the same period recorded a surplus of only \$1,407.13. The increased sales of chickens, through the establishment of several outlet centers around the city, accounted for this increase. Present indications point to continued profitability of COOPEP operations, although increases for the remaining three quarters may not be as high as the first, traditionally the best quarter of the year, in terms of production (pp. 16-17).

End-of-Project Status Achievement

The Project Agreement listed eleven End-of-Project Status targets to be achieved by the PACD. The table below summarizes their achievement status:

I	II	III
EOPS TARGET	CONDITION ACHIEVED	ACHIEVEMENT STATUS
1. Feed conversion ratio reduced from 3:1 to 2.5:1	2.5:1 (minimum)	100%
2. Mortality rate reduced from 8% to 5%	4.6% (minimum)	108%
3. COOPEP buying up to 75% of members' broiler production	41% <sup>A</sup>	55%
4. Trained, full-time General Manager hired	on-board	satisfactory
5. Trained, full-time Grow-out Manager providing T.A. services to members	on-board	satisfactory
6. On-farm and classroom training program established.	functioning	satisfactory
7. Revolving credit fund established	functioning	satisfactory
8. COOPEP feed mill established	not done <sup>B</sup>	not achieved
9. COOPEP membership increased from 20 to 40	34 (current)	85%
10. Two COOPEP members, medical doctors, trained in poultry science	not done <sup>C</sup>	not achieved
11. Long-term institutional development plan formulated	done	satisfactory

A. This average was calculated from survey data.

B. The Mission had budgeted \$75,000, an insufficient amount of funds, for this activity. A modest, though comprehensive, proposal called for \$169,000 for this activity.

C. This activity was not achieved because it was judged to be impractical. The doctors could not abandon their medical practice for any extended amount of time to go to the U.S. for training.

### Evaluation Methodology

This evaluation is a collaborative effort of the Mission's Evaluation (DRE/EVAL) and Economic Analysis (OEA) Offices. ADO personnel provided critical logistical support assistance, but did not participate in the administration of survey questionnaires. Field visits were effectuated during three days and a questionnaire, developed by DRE/EVAL with ADO and OEA assistance, was administered to 11 of the 34 total COOPEP members.

The questionnaire is divided into five sections, each one addressing an important aspect of the project. Questionnaires were written in French and administered in French and Creole by the two members of the evaluation team, both FSN employees and therefore fluent in both languages. The questionnaire took about an hour and a half to complete, on the average. At each site, in addition to interviewing the COOPEP member selected, the evaluation team took considerable time visiting the chicken cages and observing operations. The questionnaire is attached as Annex A.

The evaluation team purposely sampled growers in all three production categories - big, medium and small - in order to assess the needs and particular concerns of each group. Because USAID is particularly concerned with respect to participation of small growers in the coop, this group constituted the majority of the population interviewed. Within categories, the most representative sample of that group were surveyed on a first-time available basis. If a candidate was not available, the next one on the list was selected. The population surveyed produce approximately 700,000 broilers per year, representing three-quarters of COOPEP's annual production. Following is a break-down of the sample population by production categories (see Table 1, annexed, for more details):

<u>A</u> Production Category	<u>B</u> Number Surveyed	<u>C</u> Percentage Population Surveyed	<u>D</u> Annual Production (Broilers)	<u>E</u> Percentage Annual Production
Big Producers	2	18	560,000	82
Medium Producers	2	13	46,000	7
Small Producers	<u>7</u>	<u>64</u>	<u>73,000</u>	<u>11</u>
Total	11	100	679,000	100

The evaluation team also held discussions with ADO project management personnel, interviewed COOPEP staff and Board of Directors, as well as the CLUSA expert, Dr. Manning, who doubles up as the project implementor. In addition to that, project documents, relevant project studies and analyses were reviewed.

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Acknowledgements

The evaluation team would like to thank COOPEP staff (COOPEP General Manager, Grow-Out Manager and Accountant) for their assistance and cooperative attitude. We would like also to thank Dr. Manning, the CLUSA expert, for his unflagging willingness to satisfy our information needs. Agronomist Marc Eddy Martin, USAID Project Coordinator, is to be commended for logistics support in arranging field visits. Last but not least, we would like to acknowledge the contributions of Mrs. Mireille Colin, DRE Program Assistant, and Ms. Judith Desmornes, OEA Division Secretary, for preparing numerous drafts of the evaluation report.

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## II. RECOMMENDATIONS

### A. Project Continuation

The Mission is urged to continue funding the project for an additional 18 months if COOPEP is to survive as a viable cooperative institution. The owner of the PRINSA company, Mr. Brandt, enjoys a near monopoly position of the poultry market and is reputed to have vowed to run COOPEP out of business by the end of this year. His basic strategy consists of trying to coopt COOPEP members into his organization by offering them marketing arrangements that are more lucrative than COOPEP's. Thus, he has been successful in causing two previous members, one of them a big producer, to defect and sell all of their chickens to him. Without USAID's continuing support, this trend of defection may accelerate and demoralize COOPEP to the point of oblivion.

Another argument for project continuation is based on the recognition that this is an institutional building effort of a cooperative, a critical priority intervention of the Mission, and is worthy of long-term commitment. The financial analysis section (see Part III, Section B3) of the report demonstrates that the coop is capable of operating in a surplus position and is therefore to be encouraged on the road to self-sustainment. After 18 months of project operations, COOPEP is already able to generate enough revenues to pay the salaries of most of its professional staff; i.e., Grow-out Manager, Accountant and Secretary, and two-thirds the salary of its General Manager. In addition, it buys office supplies and equipment from its own funds. From a comparative standpoint, it should be noted that the Mission has already provided two grants to the coffee cooperatives through the Small Farmer Marketing (0083) and Strengthening Coffee Coops (0169/2) projects, and CCH's financial performance is nowhere near COOPEP's level.

### B. Membership

Project progress toward the accomplishment of doubling the coop membership is noted with satisfaction. However, in terms of absolute numbers, 34 is still too small a number to allow for long-term viability of the institution. COOPEP is therefore urged to intensify its membership drive by identifying potential poultry raisers in neighboring rural areas of the metropolitan area, and vigorously recruiting them into the coop. Annex B, providing a list of some likely candidates, is a good starting point.

Active expansion in the rural provinces is not advised at present. COOPEP efforts to establish poultry producing groups in five rural areas (Les Cayes, Plaisance, Thomassique, Torbeck and Bassin Bleu) should continue if scarce resources permit, but additional efforts along those lines

are not recommended. We concur with the CLUSA/U.S. position that COOPEP's energy and resources should be devoted to the consolidation of the institution in the metropolitan area for the present, to render it into a viable institution. Only after that is accomplished and additional funding becomes available should COOPEP actively pursue expansion in rural areas.

C. Marketing

Evaluation survey findings indicate that COOPEP did not substantially increase its share of market sales of frozen and live broilers over and above the 40% project start-up level. Lack of funds and staff were identified as constraints. The Mission should seriously consider funding the services of a competent poultry marketing expert to devote full-time attention toward the aggressive development of new market outlets for COOPEP produce, and provide COOPEP with increased capital to enable it to buy more chickens from participating members and broaden its economic base. In this context, COOPEP is urged to follow through in setting up portable bins throughout the city. The CLUSA expert estimates that if 40 more can be set up, that COOPEP will have increased broiler sales by about 10,000 a month (pp. 11-12).

D. Revolving Fund

Additional capital is needed to allow members to increase operations efficiency, to expand production and sales to COOPEP. Growers and project staff surveyed were unanimous in the view that the maximum amount of \$5,000 offered to small and medium producers is not enough. The need to increase fund capital is the more critical in light of planned expansion of the membership (p.15).

E. Feed Mill

While COOPEP makes a persuasive case for the establishment of its own feed mill, it is our opinion that such an action is a bit premature for the present. We feel that priority should be placed on expanding the membership, production and sales of broilers as primary conditions in order to financially sustain such a major undertaking. When these conditions are fulfilled, the coop should be in a strong position to obtain a loan to finance at least half of the operation (from SOFIHDES or FDI, for example), the remainder coming from USAID, subject to funding availability, on a concessionary, refundable loan basis. By making members financially liable for the establishment of the mill, they will be forced to think carefully about embarking on such a major undertaking (pp. 15-16).

F. Technical Assistance

Technical assistance has been found to be critical to the success of the project and should continue to be funded. COOPEP intends to aggressively expand its membership base during the current year by admitting new small growers into the coop, and it is precisely the small growers that most acutely need the technical assistance and on whose operations it has the most impact (pp. 10, 12).

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### G. Record-Keeping

While the quality of data gathered at the farm level is considered to be generally satisfactory, COOPEP needs to initiate techniques to accurately measure operating costs and revenues at the farm level, as well as closely monitoring employment and income generated from operations funded by project funds. In addition, COOPEP is urged to move quickly to integrate members who have recently joined the coop into the information system (p.12).

### H. Fund Capitalization

COOPEP members must contribute something on a regular basis to allow the institution to capitalize its financial resources over time. It is recommended that one to two cents be deducted for each pound of chicken sold, for that purpose (p.9).

### I. Long-Term Development Implications

COOPEP, PRINSA and the Duret group are urged to come to an understanding for their mutual benefit, the economic well-being of the consuming public and the country. The poultry sector (and therefore, the project) as constituted, represents an outward flow of scarce foreign exchange in the form of import of primary products (corn feed), feed concentrates, vitamins, eggs and other supplies. Together, these three producing groups just about make up the whole poultry sector in Haiti. If they would pool their resources together, they would be in a strong position to develop an integrated national operation. As a result of rationalizing market operations, most of the resources generated by the poultry sector would stay in-country, and broiler prices would come down, because production costs would decrease. USAID could play a crucial role as mediator, attempting to palliate and/or reconcile the mutual suspicions, conflicting interests and antagonism shared reciprocally by all three producing groups.

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### III. FINDINGS

#### A. COOPEP Institutional Development

##### 1. COOPEP Membership

One of the End-of-Project Status (EOPS) conditions stated in the OPG Agreement is that COOPEP will have increased its membership by 100% by the PACD. Starting out with 20, COOPEP's membership roster actually stands at 34, with 7 applicants currently undergoing processing, which means that this objective will be easily achieved. The CLUSA technical expert estimates that COOPEP will have a membership of 50 producers by the PACD, at the current application rate. USAID project management also wanted the evaluation team to examine to what extent COOPEP's membership policy promotes the inclusion and integration of small producers into the coop (see Annex C, attached). During the initial period after its formation, the influence of the few big producers was preponderant. As a matter of fact, Marcel Duret played the pivotal role in the establishment of the coop. As the biggest producer and wealthiest member, he assumed management responsibilities and invested his personal financial resources in the venture. As time went by, however, the rest of the membership became concerned regarding the dominance of the "rich bloc" in the coop. This situation finally came to a climax sometime last year when Duret and Laine, the two biggest producers, took exception to the majority decision fixing the amount of money reimbursable to members as a result of bulk buying of feed from SONUAN, at a lower level, because a portion was deducted for operating expenses. As a result of this disagreement, those two have refrained from regular participation in the coop's business even though they still remain nominal members, and are separately buying their own feed from SONUAN, thereby benefiting from the total value of the discount rate. This also means that the influence of the big producers has been so substantially reduced that today, COOPEP can be characterized on the whole as a cooperative of medium and small producers, with individual production ranging from 24,000 to 50,000 live birds a year. (See Annex D, attached, for complete membership roster).

Concurrently, an important admission requirement was substantially scaled down to attract small producers. For example, whereas before it was stipulated that applicants had to have growing facilities measuring at least 1,000 square feet (meaning a minimum production capability of about 6,000 live birds a year), current requirements call for only 250 square feet (producing a minimum of 1,500 live birds, a reduction of 75%). Finally, according to project records, 80% of the loans are made to small producers - \$4,000 being the average amount per person, per growing cycle - the remainder being reserved to medium producers. No loans have ever been extended to big producers.

Other admission criteria include the one-time application fee of \$30 and the requirement that each member own at least 10 investment shares, but not more than 1,200 shares, in the coop. A share is

bought at \$5.00. Moreover, a clause in the By-Laws empowers COOPEP to withhold 10% of the monetary value of any transaction COOPEP makes on behalf of a member, until such time as that member acquires the maximum number of shares of 1,200. So far, COOPEP has refrained from activating this clause for fear that it would cause disproportionate financial hardship on the small producers that the coop is so actively trying to woo and recruit into the institution. The fact remains, however, that members must contribute something on a regular basis to allow the coop to capitalize its financial resources over time. Dr. Manning, the project's Technical Advisor has suggested that one to two cents be deducted for each pound of chicken sold for the capitalization fund. The evaluation team concurs and recommends this measure for action.

## 2. Structural Organization

COOPEP generally follows the structural organization recommended by the National Cooperative Council (CNC: Conseil National des Cooperatives), the Government coop umbrella agency, having an Administrative Council, an Overseer Committee and the General Assembly of the membership. Section V, Article 13 of COOPEP's By-Laws establishes the Council's powers and mode of functioning, stating that it is the executive organ of the General Assembly, acting as the coop's policy making body. Its members are elected by the Assembly for a term of two years on a staggered basis, so that a third of the members are subject to reelection each year. No limit has been set with respect to the length of time members may serve. The statutes establish that the Council shall add up to an odd number which shall never be inferior to three, but fix no maximum ceiling. Currently, the Council is composed of five members. They meet whenever circumstances dictate, at the coop's locale, on the authority of the Council's President, or on the demand of a third of its members. Half of the members shall constitute a quorum. Decisions are adopted by majority vote.

It is further stipulated that the Council shall nominate at least a President, Vice-President and Secretary among its members to ensure sound management. It is also authorized to form a management committee from its members and delegate authority to a managing Director, if it so wishes. The Council's President is the coop's legal representative and is empowered to act in its name.

The General Assembly in ordinary session elects the three members of the Overseer Committee for a three-year period, renewable without limit. The members are elected on a staggered basis so that a third of the members are subject to reelection each year. Article 14 establishes this body as the coop's watch-dog committee, empowering it to examine any and all facets of COOPEP's transactions, and calls for the preparation of an annual status report to be presented to the General Assembly in ordinary session, wherein irregularities and deficiencies are pointed out. In addition, the Committee is authorized to convene the General Assembly in emergency sessions whenever circumstances warrant. The governing regulations also require that there will be at least one accountant among the three members.

Section IV, Article 12 specifies that ultimate power resides in the General Assembly. The general membership meets in ordinary session every year. Emergency or special sessions may be called by the Administrative Council, the Overseer Committee, or by a fourth of the general membership. In ordinary and special sessions, decisions are adopted by a majority of members present. In the case where the By-Laws are to be modified, at least half of the eligible members shall constitute a quorum. An extraordinary session is stipulated only in the case where the dissolution of the coop is contemplated, and the quorum is fixed at two-thirds of the eligible membership. Meeting agenda are to be communicated to the membership at least ten days prior to ordinary and special meetings. Minutes of the meetings are to be recorded and signed by at least a majority of members attending meetings.

### 3. Services

Following cooperative tradition in Haiti, COOPEP provides a number of services to participating members. A key service is the provision of credit to medium and small producers each growing cycle. Up to \$5,000 are made available to each eligible producer to buy chicks, feed and to finance other operational costs, at a 15% annual interest rate. Members are expected to reimburse COOPEP at the end of each cycle and so far, there have been no delinquencies. Loans are also made to finance construction and rehabilitation costs of chicken cages, on an available basis. In addition, COOPEP greatly facilitates operations for its members by delivering feed, medication and other supplies to growers and rents feeding and drinking bins to members on an income-graduated scale.

COOPEP also offers its members a profit-sharing plan, whereby discounts extended to COOPEP by feed and equipment suppliers are redistributed to the members on a pro-rata basis, after deducting a portion to help defray operating costs. Under current arrangements with SONUAN, the local feed supplier, COOPEP is granted a discount of \$1.75 on each bag because of bulk buying. Likewise, when COOPEP buys equipment in bulk, it redistributes discounts to participating members. The most critical service COOPEP provides its members, however, is technical assistance. The CLUSA expert and COOPEP's Grow-out Manager constantly are visiting members' farms to observe growing operations, record and update statistical data (e.g., morbidity and mortality rates) and provide on-the-spot assistance in correcting problems. Based on interviews with members, the evaluation team found that the project technical assistance team visits farms situated in near-by areas of Port-au-Prince at least one a week. It was also found that the frequency of such visits sometimes reached three times a week when a grower was experiencing operations difficulties, or during the initial period after a new member has joined the coop. Fewer visits are made to farms situated farther out, on an as-needed basis.

From the foregoing and on the strength of interviews with eleven coop members, the CLUSA expert and COOPEP's management team, it appears that COOPEP is indeed developing a true cooperative organization. Every grower surveyed underscored the importance of the one-man-one-vote and majority rule

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democratic principles, regardless of one's production capacity or the number of investment shares one owns in the cooperative. This assertion seems to be borne out by the prevailing of the majority decision over the objection of the coop's two wealthiest members, Duret and Laine, as was seen earlier. In order to consolidate and intensify this cooperative process, perhaps COOPEP should consider the creation of technical committees to allow the small producers wider decision-making experience on a day-to-day basis, instead of concentrating all oversight functions in the hands of the Comite de Surveillance. (At present, the Credit Committee is the sole existing committee). It might also help to establish relations with other successful coops or cooperative-type groups, such as CCH (Small Farmer Marketing project) and groupements (Groupement Pilot and Gros Morne projects), in order to see cooperatives in action. Finally, COOPEP management and CLUSA personnel are to be commended for organizing seminars to train the membership in the principles, responsibilities and privileges of cooperators. Thus, the RTC conducted several sessions training members in cooperative management and principles. Further, in June 1984, a CLUSA consultant organized several working sessions with COOPEP management, staff and members in the mechanics of running a cooperative. As a result, a scope of work was developed for a locally conducted course lasting ten sessions, which just ended in January 1985.

#### 4. Development Strategy

The Project Agreement calls for, and the evaluation's terms of reference (see Annex C) asked the evaluation team to determine, whether CLUSA was able to assist COOPEP in the formulation of an organizational development strategy based on an analysis of the institution's future requirements. As a result of interviews held with the CLUSA expert, it was found that CLUSA did develop a long-range plan, covering an implementation period of 20-30 years. It consists of a \$12 million proposal for an integrated poultry industry, comprising marketing, feed mill, slaughter facilities and processing plant components. The evaluation team was also given to understand that COOPEP and MEDA have entered into discussion with respect to the feasibility of the Mennonite agency financing a processing plant to produce chickens for the Middle Eastern market and breeder farms. The establishment of the COOPEP owned and operated mill was identified as the first priority. This is so because feed constitutes the lion's share of growers' investment and there is general consensus among growers interviewed that the price SONUAN charges for feed is too high.

The CLUSA representative underscored the critical need of contracting a competent marketing expert to increase COOPEP's market shares. Evaluation findings establish that the coop did not substantially increase its share of the market above the 40% start-up level, for live and frozen birds combined. Lack of funds and staff were identified as constraints. COOPEP did nevertheless succeed in increasing sales with the limited resources available by investing in the construction of portable bins displaying live birds at strategic locations around the city. Ten of them - each one holding 40 broilers - have already been placed. It is estimated

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if 40 more can be placed, that COOPEP will have increased broiler sales by about 10,000 a month.

## 5. Records

Data monitoring operations at the farm level began to be systematically gathered in June 84, despite the fact that the OPG was signed in April 1983. The CLUSA expert explained that he wasn't able to devote his full attention to data gathering before June 84 because the whole burden for project implementation fell on his shoulders, e.g.: preparing monthly reports, going to the bank, complying with AID's bureaucratic procedures, coordinating with other consultants, etc. With the return of the Grow-out Manager from the States in June 84 and with more delegation of authority to the COOPEP Manager for project implementation, Dr. Manning is now able to devote more time to the information system of the project.

The quality of production data is satisfactory, covering most major aspects of operations at the farm level, but COOPEP needs to move quickly to integrate members, who have recently joined the coop, into the information system. In addition, there is a need to initiate effective techniques to accurately measure operating costs and revenues at the farm level. Finally, COOPEP needs to closely monitor employment developed at the farm level, as well as workers' income generated thereby.

### B. Production Efficiency

#### 1. Feed Conversion Ratio

Feed conversion or feeding efficiency is the amount of feed pounds required to produce one pound of poultry meat. Prior to project implementation, COOPEP was averaging 2.9 pounds of feed to 1 pound live chicken. Records kept for twelve small producers during the last nine months indicate that the average feed conversion ratio of members range from an average of 2.3 to 2.5:1, a saving of at least 0.4 lbs. of feed per pound of weight gain, or 1.2 lbs. per average mature bird (weighing 3 pounds). for 800,000 to 1 million broilers sold per year at \$.1975 lbs., this translates into a yearly savings of \$188,000 to \$235,000. Project records indicate that small growers are producing as efficiently as larger farmers and are benefiting in those gains in proportion to their share of production.

#### 2. Mortality Rate

Prior to project implementation, the average mortality rate of broilers prevalent among COOPEP poultry growers was 8% per flock. Project records for April to August 84 indicate that the mortality rate significantly declined, to a range from 3.09% to 4.6%, a decrease of approximately 50%, or a saving of over 40,000 broilers per year. Survey findings establish fairly similar results. In fact, for ten growers who kept records, the mortality rate varies in a range from 0.016% per flock to 5% (see Table 2), for a weighted average of 4.15%. However, if we consider only medium and small farms, the average weighted mortality rate is only 3.28%. COOPEP records for

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twelve small and medium growers - some of whom were interviewed - for October through December 1984, show that the average mortality rate was only 2.80%. The foregoing illustrates the significant impact of technical assistance on the production of small growers.

Using the 4.15% mortality rate for January through December 1984, approximately 35,000 broilers are estimated to have been saved by all members. At an average market price of \$2.40 per broiler, this represents over \$80,000 in additional annual revenues for COOPEP members. For the small and medium growers averaging the 3.28% mortality rate for the January through December 84 period, approximately 15,000 broilers are estimated to have been saved for that population of growers. At the \$2.40 average price per broiler, this represents over \$36,000 in additional annual revenues.

### 3. Production Rate

Project personnel estimate that growers can produce a maximum of six flocks per year, with a nine-week growing/selling desinfection cycle. Improvements occurred primarily in small farms where the number of flocks per year have doubled in certain cases. One reason for that is because of the reduction of the mortality rate seen in the previous section. Another factor is the fact that growers who were not producing before during the hot summer months, are now developing a year-round production trend. Improvements at the big farms level are less significant because their production rate is already adequate. Nevertheless, the frequency of flocks increased from 4-5 to 5-6 per year for big growers. If this 18% increase is applied for growers in all categories, additional revenues of \$414,720 are generated per year (18% x 960,000 yearly production X \$2.40 average broiler price).

According to the latest available information, broiler production by category for 1984 is as follows:

<u>Category (c)</u>	<u>Number</u>	<u>Monthly Production</u>
Small	21 (a)	19,264
Medium	4	8,250
Large	3 (b)	28,000

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(a) There are actually 24 small producers; 3, however, are not producing broilers.

(b) Exclusive of Duret and Lainé.

(c) Small producers produce up to 2,000 broilers a month,  
Medium producers produce between 2,000 - 4,167 a month, and  
Large producers produce between 4,167 - up to 30,000 a month.

2/1

4. Conclusion

Because of the low mortality rate and a better feed conversion ratio, small farmers are obtaining major benefits from the project, in the form of increased net cash income. Annual benefits from improvements in farm management practices accruing to small producers participating in the survey (see Table 1) total \$17,301 for improvements obtained to date in the feed conversion ratio. To obtain this figure, the number of broilers produced per year by small producers surveyed (73,000) is multiplied by 1.2 lbs. (the gain per broiler 0.4 x 3 lbs.) and then multiplied by the price of one pound of chicken feed (.1975). Annual benefits from the reduced mortality rate total \$8,269. To obtain this figure, the yearly production of small producers, (73,000) is multiplied by .0472% (mortality rate before 8%, less mortality rate after 3.28%) and by the average price per broiler (\$2.40). Should the small producer increase his production by one flock per year (conservative estimate), \$14,308 in annual benefits are generated, if 20% of 73,000 are considered additional production, and multiplied by \$2.40, average price of a broiler.

Total benefits from improvements in farm management practices for the seven small growers surveyed are estimated at \$35,000. This yields an average of \$5,000 in additional annual income per producer.

For total benefits accruing from better management practices for all COOPEP members:

a.	<u>Improved feed conversion ratio</u>	
	800,000/1,000,000	yearly production of broilers
x	0.4	saving on feed conversion ratio (lbs.)
x	3	average weight per chicken (lbs.)
x	\$ .1975	price of feed (pound)
=	<u>\$189,600/\$237,000</u>	
b.	<u>Lower mortality rate</u>	
	3.85	8% initial mortality rate minus 4.15% mortality rate achieved during IOP period
x	800,000/1,000,000	yearly production
x	(\$2.40 - \$1.42)	average chicken price (3 lbs) - costs of feed
=	<u>\$30,184/\$37,730</u>	

c. Additional flock per year

Only medium and small growers are considered on a yearly production of approximately 450,000 broilers:

	450,000	
x	0.2	increased quantity
x	<u>\$2.4-\$1.42</u>	average chicken price (3 lbs) - cost of feed
=	<u>\$88,200</u>	

Total of a., b., and c.                    \$307,984/\$362,930

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If present worth of projected benefits for the next ten years is compared with present worth of the costs of the project, the net benefits - present worth of benefits less present worth of project costs - are approximately \$1 million (Table 3). The economic feasibility of the project seems all the more assured given that only part of the benefits have been considered. Nevertheless, they cover the costs of the project. If we were to take into account additional employment generated as a result of project activities, as well as other non-quantifiable benefits, it is reasonable to assume that the value of total project benefits would be considerably higher than \$1 million.

#### C. Revolving Loan Fund

The revolving fund is established and fully operational. Lending criteria and procedures were prepared beginning November 1983 by COOPEP and the CLUSA Advisor and approved by AID and CLUSA/U.S. in March 1984. The amount of \$52,528 was deposited in a separate project account and an accountant was hired to monitor usage of the fund. Loans are approved by the three member Credit Committee. Interest is fixed at three percent (3%) per ten-week growing cycle, or 15.6% on an annual basis. Loans are made in-kind for feed, medicines, vitamins and other supplies and are monitored by the technical assistance team. At maturity, the grower reimburses the full amount, plus interest.

The first loan was made on June 12, 1984 with an initial disbursement of \$5,000. Through November 31, 1984, twenty-six (26) loans to 14 different medium and small producers for a total of \$87,750 were approved. Twelve have been repaid for a total amount of \$46,092.50, and fourteen are therefore outstanding for \$43,826.50 (see Table 4). Loan amounts range from \$1,400 to \$5,000 averaging \$3,375, generating \$2,169 in interest earnings, \$1,356 of which have already been received. At present, 24 of the 34 COOPEP members fall in the small growers category (about 71%) and project personnel estimate that the membership will grow by two small producers per month through April 1985, PACD. Everyone contacted by the evaluation team strongly affirmed that the revolving fund is a critical component of the project, enabling small and medium producers to expand production. The evaluation also found total consensus that available funds are not enough to satisfy existing demand. It is therefore recommended that the capital of the fund be increased especially in light of the additional demand that will be put on it by the new small growers who will be joining the coop in the future.

#### D. Feed Mill

According to the terms of the Project Agreement, CLUSA was supposed to assist COOPEP in the establishment of a feed mill fully owned and operated by the coop, satisfying at least 75% of members' current feed requirements, by the PACD. The amount of \$75,000 were budgeted for that purpose. It was believed that the mill would provide feed to COOPEP members at a lower price than SONUAN, the sole supplier of local feed. CLUSA contracted the

independent consulting firm of W.J. Mc Neill, Real Estate, which conducted a full-blown study in June 84, proposing the acquisition of a site measuring 40' x 80' x 14' to contain: 1) warehouse/office space with two rest rooms; 2) a feed mill producing 3,600 tons/year, one shift per day, with possibility for second shift expansion; and 3) storage facilities consisting of 250,000 bushel bins for grain and 46 ton soybean meal storage. This comprehensive package will cost \$723,000 in total investments, \$183,000 for the feed mill alone, way beyond the realm of possibility. It is for this reason that CLUSA and COOPEP carried out their own feasibility study of the feed mill last November. This second proposal is more modest, calling for a total investment of \$169,000. The feed mill selected is manufactured by an American firm, PHS, having a 32-ton/day capacity, priced at \$36,500, as opposed to \$183,000 for the Combs mill recommended by the earlier study. The cheaper priced mill would also require a greater number of unskilled laborers than the more automated, high capital cost alternative proposed by the Mc Neill report. COOPEP has calculated that participating growers' demand will allow the mill to initially function at 30% capacity with the possibility of raising this percentage above the 50% level if two of the three biggest growers currently separately buying their feed, would buy their feed from the coop mill.

Based on the foregoing projections and on the strong interest that COOPEP members share in establishing the coop mill, it appears that this continues to be a defensible option. In fact, according to survey findings, the ten members interviewed were unanimous on that score (see Table 5), pointing to the generally poor quality and high price of SONUAN feed (Tables 6 and 7 respectively). The fact remains, however, that even the COOPEP package costs \$94,000 more than the amount allocated in the project budget for that purpose. The evaluation team does not recommend that the Mission grant-finance the establishment of the feed mill. Inasmuch as COOPEP is engaged in commercial activity, we believe that it should be subjected to the discipline of the market-place and apply for a loan, with USAID recommendation, to SOFIHDES.

#### E. Financial Performance

To date, the project is starting slowly to have an impact on COOPEP's financial performance. COOPEP earned slight surpluses in the 20-month period from initiation of operations to September 1983, and in the following six-month period of October 1983-March 1984. Income was earned primarily from sale of frozen and live broilers, feed sales rebates and an Inter-American Foundation grant of \$25,800.

Following initiation of the project, SONUAN, the local feed concentrate monopoly, changed its pricing policy to favor large customers, by raising prices while simultaneously granting progressive discounts on quantity purchases. Before this action, each COOPEP member had his own account at SONUAN. Following the change, members banded together to purchase jointly under the COOPEP account, obtaining a discount which at present amounts to 9%. This discount is divided between members and COOPEP. However, since

March 1984, the cooperative's two largest feed purchasers have purchased feed directly from SONJAN, in order to receive the entire rebate. For this reason, COOPEP's rebate income has dropped by more than 75%. Project records for the fiscal year October 1983 - September 1984 showed a loss of approximately \$3,500 (earning \$131,654.86 and expending \$135,145.44).

For the first quarter of FY 85, an important improvement has taken place in the financial situation of COOPEP, compared to the same period of the previous FY. In fact, for October through December 84, the cooperative had a surplus of \$14,892.62. For the same period last year, the surplus was only \$1,407.13. This was a consequence of the establishment of new sales centers where chickens are sold to a broader mass of consumers.

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#### IV. PROJECT INFORMATION

##### A. The Poultry Sector

Poultry production in Haiti is made up of indigenous grown chicken, raised by small farmers in the country side and chicken produced commercially by small and medium sized growers, who sell mostly to retail shops and supermarkets in the Port-au-Prince area and other urban centers. Commercial production of broilers began in the late 1950s and expanded steadily so that by the mid 1970s approximately one-half million birds per year were being marketed. In 1982, approximately 2.5 million broilers were marketed.

COOPEP (Coopérative des Eleveurs de Poulets) was organized in January 1981 to assist members to produce and market broilers and eggs more efficiently. At present, membership in COOPEP is made up of 34 commercial poultry growers accounting for about 40% of the commercially produced broilers in the country (947,645 for 1984). The most recent major entrant into the poultry industry is the PRINSA Company (1983). This poultry operation will have an annual production capacity of 1.8 million broilers by 1985, and its owner has recently received a major loan totaling \$6 million from a consortium of sources.

The key constraints to small farmer poultry development in Haiti are lack of knowledge of efficient growing operations, lack of balanced poultry feed at affordable prices, lack of credit to assist the smaller growers through the start-up and grow-out phases, and the lack of effective supply and marketing structure. The project addresses these constraints by increasing the ability of COOPEP to provide these needed services and to build up its institutional capability. The project will enable COOPEP to extend its membership and its extension services to assist other commercially oriented small growers. In addition to providing specific training in poultry production, the project will involve COOPEP members in the day-to-day functioning of a modern poultry production and marketing cooperative.

##### B. Project Description

On March 30, 1984, USAID granted the sum of 500,000 dollars to CLUSA (see Annex E for Project LOP Budget), for an eighteen month period, to provide support to the Cooperative des Eleveurs de Poulets (COOPEP), a Haitian poultry cooperative, in order to increase small farmer income through the development of an integrated cooperative poultry industry. Under the terms of the Project Agreement, COOPEP will be assisted by the Grantee, CLUSA, to provide increased technical, managerial and educational services to its members and potential members. The technical assistance CLUSA is providing COOPEP over the life of project period will address the major developmental and planning needs of the cooperative. One of the most pressing needs is for increased technical assistance to its members in order to develop better farm management techniques that will result in a reduction of poultry mortality losses and an improved feed conversion ratio. Members also are in need of training in cooperative operations and management as the cooperative business

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enterprise is a relatively new phenomenon for them. Additional assistance is needed in the development of COOPEP's management and administrative capabilities and the expansion of its marketing operations. Finally, COOPEP requires assistance to develop a long term organizational plan and investment strategy that will assure its position as a self-sustaining business enterprise and eventually allow it to assist with the development of new poultry enterprises throughout the country.

The terms of the Project Agreement called on CLUSA to provide appropriate assistance to COOPEP to allow it to develop its potential as a cooperative business enterprise. Specifically, CLUSA is to provide a poultry technician to work directly with COOPEP members on production problems and serve as the trainer/advisor to the cooperative's Grow-out Manager. Consultants will be provided by CLUSA, as needed, in such areas as cooperative management, animal husbandry, animal nutrition, production credit and financial analysis. Training for the Haitian staff of COOPEP (General and Grow-out Managers) is to be provided with project funds. Some equipment for feed milling, production and marketing will be purchased and a revolving credit fund will be set up to finance production operations of members.

It is anticipated that by the end of the 18-month project period, COOPEP will be a considerably stronger institution and its members more productive. Specific outputs expected by the end of this first phase of the project are:

1. participating members will reduce their feed conversion ratio from an average of 3 lbs. feed for 1 lb. of live bird to 2.5:1, with some members achieving a 2:1 ratio;
2. participating members will decrease their mortality losses from approximately 8% to 5% during the seven-week grow-out period;
3. COOPEP will increase its marketing capability for handling its members produce from 20% to 75%;
4. a trained, full-time General Manager will be in place;
5. a trained, full-time Grow-out Manager will be providing appropriate services to COOPEP members;
6. a program of on-farm and classroom training in poultry pathology, farm management, poultry husbandry and cooperative member education in full operation for members and potential members will be strengthened;
7. a revolving credit fund will be established for COOPEP members;
8. a feed mill owned and operated by COOPEP, meeting at least 75% of the current feed requirements of its current members;
9. increase in COOPEP membership of approximately 100%;

10. the two members of COOPEP who are medical doctors will have been given field and laboratory experience in poultry pathology and nutrition; and

11. a long-term investment plan developed covering such areas as procurement and supplies, feed, credit, processing and marketing, based on an analysis of COOPEP's future expansion requirements.

CHAPTER V

TABLES:

1. Production Data of Sample Population
2. Mortality Rates of Broilers of Sample Population
3. Comparison of Benefits and Total Costs of the Project
4. COOPEP Loan Portfolio, as of November 30, 1984
5. Establishment of COOPEP Feed Mill
6. Feed Quality
7. Feed Price

TABLE 1  
PRODUCTION DATA OF SAMPLE POPULATION

<u>I. BIG FARMS</u>	<u>YEARLY PRODUCTION</u>	<u>% PRODUCTION</u>	<u>% NUMBER</u>
1. Marcel Duret	500,000		
2. Joseph Derac	60,000	82%	18%
<u>II. MEDIUM FARMS</u>			
3. Mme Robert Stecker	24,000		
4. Moise Cadet	22,000	7%	18%
<u>III. SMALL FARMS</u>			
5. André Duroseau	12,000		
6. André Joseph	12,000		
7. Francois Moréal	12,000		
8. Mme Ketly Salnave	12,000		
9. Gladys Stecker	12,000		
10. Jocelyn César	8,000		
11. Danielle Devesin	5,000	11%	64%
<u>TOTAL</u>	<u>679,000</u>	<u>100%</u>	<u>100%</u>

TABLE 2  
MORTALITY RATES OF BROILERS OF SAMPLE POPULATION

<u>I. BIG FARMS</u>	<u>MONTHLY PRODUCTION</u>	<u>AVERAGE MORTALITY RATE</u>
1. Marcel Duret	40,000	4.5%
2. Joseph Derac	5,000	3.0%
 <u>II. MEDIUM FARMS</u>		
3. Mme Robert Stecker	2,000	3.75%
4. Moise Cadet	1,800	2.83%
 <u>III. SMALL FARMS</u>		
5. André Duroseau	1,000	5%
6. Francois Moréal	1,000	2.25%
7. K. Salnave	1,000	3.75%
8. G. Stecker	1,000	3.75%
9. J. César	650	1.5%
10. A. Joseph	500	0.016%

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TABLE 3

COMPARISON OF BENEFITS AND  
TOTAL COSTS OF THE PROJECT  
(1984 \$ 000's)

	<u>BENEFITS</u>	<u>P.W. (2)</u>	<u>COSTS</u>	<u>P.W.</u>
1. 1984	300	300.	500	500
2. 1985	270 (1)	246	-	-
3. 1986	243	201	-	-
4. 1987	218	164	-	-
5. 1988	196	135	-	-
6. 1989	177	110	-	-
7. 1990	159	90	-	-
8. 1991	143	73	-	-
9. 1992	129	60.	-	-
10. 1993	116	49.	-	-
TOTAL	1,951	1,428	500.	500

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(1). From the 2nd year on, depreciation is assumed at the rate of 10% per year,

(2). Present worth at 10%.

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TABLE 4  
COOPEP  
LOAN PORTFOLIO  
November 30, 1984

<u>MEMBERS</u>	<u>LOANS</u>	<u>AMOUNT</u>	<u>INTERESTS</u>	<u>RECEIVED</u>	<u>DUE</u>
1. Mme R. STECHER	2	10,000	300	10,300	0
2. Mr. M. FRANCOIS	5	9,950	270	5,562	4,686.50
3. Mr. R. LEVEILLE	2	10,000	261	5,150	5,150
4. Mr. A. DUROSEAU	3	9,500	242	5,150	4,635
5. Mr. E. OBAS	2	10,000	214	5,150	5,150
6. Mr. A. AUBRY	2	10,000	261	5,150	5,150
7. Mr. P. JEAN PIERRE	1	3,300	99	3,399	0
8. Mr. E. CADET	1	4,000	120	4,120	0
9. Mr. R. ARISTIDE	2	4,400	93	2,575	1,957
10. Mr. B. BAYARD	1	5,000	150	0	5,150
11. Mr. R. ARNOUX	2	4,000	82	0	4,120
12. Mme K. SALNAVE	1	2,800	30	0	2,884
13. Mr. J. MORISSET	1	2,000	21	0	2,060
14. Mr. R. DEGRAFF	1	2,800	26	0	2,884
<u>TOTAL</u>	26	<u>\$87,750</u>	<u>\$2,169</u>	<u>\$46,092.5</u>	<u>\$43,826.5</u>

TABLE 5

SAMPLE POPULATION RESPONSE WITH RESPECT TO  
ESTABLISHMENT OF COOP FEED MILL

<u>CATEGORY</u>	<u>NUMBER</u>
For	10
Against	0
<u>TOTAL</u>	<u>10</u>

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TABLE 6

EVALUATION OF FEED QUALITY SUPPLIED  
BY SONUAN, BY SAMPLE POPULATION

<u>CATEGORY</u>	<u>NUMBER</u>
Not Satisfied	5
Satisfied on Occasion	3
Satisfied	2
<u>TOTAL</u>	<u>10</u>

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TABLE 7

EVALUATION OF PRICE OF SONUAN FEED  
BY SAMPLE POPULATION

<u>CATEGORY</u>	<u>NUMBER</u>
Too Expensive	9
No Comment	1
<u>TOTAL</u>	<u>10</u>

CHAPTER VI

ANNEXES

- A. Survey Questionnaire
- B. List of Potential Poultry Growers
- C. Evaluation Terms of Reference
- D. COOPEP's Current Membership Roster
- E. Project IOP Budget