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DOMINICAN REPUBLIC:

AN ASSESSMENT OF USAID RETURNED PARTICIPANTS IN THE AGRICULTURAL SECTOR

FINAL REPORT

Bureau for Private Enterprise
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EXECUTIVE SUMMARY

Objectives of the Study

Between 1967 and 1989, the United States Agency for International Development in the Dominican Republic (USAID/DR), provided over 400 scholarships for academic training (BS, MS and Ph.D) in the United States and third countries in the area of agriculture. The purpose of this study is to assess the impact of USAID graduate professionals in agro-related institutions, both public and private, and the extent to which institutions in both sectors have been able to utilize efficiently the resources and skills these graduates offer. The study recommends steps USAID/Dominican Republic can take in order to increase the value of training to institutions and to graduates and develop better linkages between these graduates, their employers, and the Mission.

Study Methodology

Two survey instruments were designed; one for all returned participants who had been sponsored by USAID to receive graduate training in agriculture since 1967, and the other for institutions which either sponsored and/or employed these graduates:

1. **Survey of Participants.** This questionnaire was designed to provide updated data on each returned participant (including address, telephone number, place of work), and to provide a profile of the participants, including salary and job histories. A total of 250 participants were interviewed.

2. **Survey of Institutions.** This questionnaire was designed to provide data on the uses and perceived benefits of various types of long-term training in agriculture sponsored under USAID projects and programs. It also provided data on organizational salary and other incentive policies for returning participants. A total of 37 institutions were interviewed for this study.

3. On the basis of the data gathered from the studies, J.E. Austin Associates (JAA) also prepared a DbaseIII+ file with updated information on all the participants contacted. A DbaseIII+ program was designed to enable the ARD Office of USAID/Dominican Republic to maintain a database on participants and to conduct various types of searches. Though the DbaseIII+ program was designed for use only with

the file of long-term participants in agriculture, it can be adapted to include data on short term participants and non-agriculture fields of study.

The sampling frame for both surveys relied on Mission documentation and files existing since 1967[1], such as papers concerning training in the agriculture sector, training programs, PIO/P's, and records and reports available in the Human Resources (HRD) and the Agriculture and Rural Development (ARD) divisions in Santo Domingo. Information on field of study, degree, university giving the training, date of study, addresses, and telephone numbers was extracted from those files for all those who had received long-term training under agriculture or related projects.[2] The data were incorporated into computerized DbaseIII+ files. USAID files were supplemented with data on Dominican participants kept by the Latin American Scholarship Program at American Universities (LASPAU) in Cambridge, MA.

The final sampling frame for the participants contained a total of 440 names, including those who were still studying. The survey team was able to establish the whereabouts of 403 persons (92 percent of the total universe). The survey team established that of these 403, a total of 285 returned participants could be reached for the survey (the rest were still abroad or had died). Hence the 250 participants interviewed represents 88 percent of the total number of participants currently residing in the country.

The sampling frame for the agencies was drawn on the basis of the information gathered from the participants during their survey. The survey covered all the public and academic institutions in which the surveyed participants had been working.

Both survey instruments were tested and changes made in light of the pilot test results. Only minor changes to the instrument were required, primarily in the codification of variables. On average, each interview lasted 10 minutes.

The local JAA survey monitor also contacted a random sample of approximately 10 percent of those reached by the survey team and verified that all interviews had been conducted properly.

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[1]The first year in which Dominicans were sent abroad for academic training in agriculture.

[2]The project numbers included in the sampling frame were: 159, 160, 125, 126, 156, 214, 236, 144, 127, 157, 216, 186, 640, 179, 243, and 000 (PD&S) agriculture.

Results of the Surveys

1. Eighty-eight percent of the graduates have been male. The most popular fields of study were agronomy (19 percent of all participants surveyed specialized in this area) and agricultural economics/agribusiness management (18 percent of the total specialized in this area).

2. On average, the mean salary upon return increases significantly in real terms (after controlling for inflation). After controlling for year of graduation, sex, field of study, and type of employer (public/private), regression analysis showed that mean monthly salaries upon return were 5 to 10 percent above previous salary.

3. On average, real mean salary increases are 30 to 40 percent higher for those who did not go back to their sponsoring institutions.

4. On average women made RD$770 a month less than men, after controlling for factors such as number of years working, post, field of specialization, and degree obtained.

5. Many graduates have migrated out of public sector institutions and into fields related to agribusinesses. While 46 percent of the graduates have been sponsored by public sector agencies, 70 percent end up working for private sector institutions.

6. The biggest beneficiaries of long-term training programs have been the private for-profit enterprises (both national and international corporations and firms). While none of these firms sponsored training, 32 percent of the graduates are now working in these firms, providing them with a highly skilled labor force trained at public expense.

7. Long-term returned participants contribute significantly to improvements in the productivity of the organization. Over 90 percent of the institutions contacted believed that the training had significantly improved the quality of the graduate's work and over two thirds believed that the graduate had contributed to the diffusion of new knowledge and technology in the organization.

8. A higher proportion of graduates return to academic institutions (90 percent compared to an average of 56 percent who return to all sponsoring institutions); these graduates stay longer (an average of 51 months, compared to an average stay of 25 months for all graduates who return to their sponsoring institution). Academic institutions are most likely to allow graduates to apply new skills.

9. Among public sector institutions, those operating in the services sector (finance and marketing) have the highest proportion of returning graduates (77 percent) and the highest average retention of these graduates (38 months).

10. Over 80 percent of all graduates continue to work in agriculture-related fields.

11. Ninety-five percent of those interviewed expressed interest in forming an association of ex-scholarship recipients.

12. Participants would like to see short-term seminars, courses and visits to help them keep up to date with their fields of specialization.

Conclusions and Recommendations

Conclusions:

1. **Long-term participant training programs in agriculture have brought real benefits both to the recipients of scholarships and to the institutions in which they work.** On average participants have enjoyed real salary increases of 40 to 50 percent upon return. Graduates have in many instances gone on to hold important posts in government (3 have been Secretary of Agriculture) and in private enterprise. Over 90 percent of the institutions employing these participants have noted significant increases in the quality of their work and two thirds believe they are benefitting from the skills and knowledge brought back by the graduates to the organization.

2. **Remuneration benefits received by participants and perceived benefits from training received by institutions vary by field and type of degree.** The structure of the Dominican economy has changed substantially since 1965 and so has the demand for various types of training. The migration of graduates in and out of various fields and institutions and changing salary patterns reflect these structural changes in the economy. Moreover, locally available training in agronomy and education has improved substantially.

3. **Academic institutions have been able to make the most efficient use of their graduates, as measured by retention rates of graduates and diffusion of graduate skills throughout the organization.**

4. **Public sector institutions operating in the services sector (such as finance and marketing) have made more efficient use of their graduates than other types of public sector institutions.**

5. **Long-term training in agriculture has produced and continues to produce real benefits for the Dominican agriculture sector.** Survey results show that even if most graduates have chosen to leave the public sector, over 80 percent continue to work in the agriculture sector.

6. **Women have benefitted less from the long-term training programs than have men.** Less than one fifth of all participants have been women. Women receive lower salary benefits upon return; lower salaries persist throughout their careers. Women also seem to have limited opportunities to change jobs and tend to remain in those types of institutions which are less dynamic and use the skills of their graduates less efficiently (public sector agencies). Thus women may not be able to use their newly acquired knowledge and skills as effectively as men. Lower migration out of the public sector may be a matter of choice; however, survey results suggest that it may also be due to the fact that women lack an effective network of contacts which facilitate transfers within posts and among institutions, thus hindering their ability to reach positions with real decision-making power.

7. **Candidates need better pre-departure and post-scholarship return orientation.** Focus group feedback indicated that current USAID programs in this regard are not perceived as adequate.

8. **Participants feel that the opportunities to keep up to date with the skills and knowledge obtained abroad are limited.** Focus group discussions revealed that there was a strong demand for short seminars, courses and visits to help them keep up to date with their fields of specialization.

The following actions are recommended for long-term participant training programs in agriculture:

1. **Kinds of training:**

   - Focus participant training programs in those degrees and areas for which there are no perceived adequate local substitutes. The Mission's decision to discontinue Bachelor degree training abroad is warranted given the survey results; over two thirds of respondents believed that locally available training at this level is comparable in quality to training available abroad.

   - De-emphasize training in agronomy and emphasize training in management, agricultural marketing, plant pathology, pest management, horticulture, mechanization, and natural resource conservation. The purpose of this study was to determine the impact of training programs on the agriculture sector and not to

conduct a needs assessment. Nevertheless, the salary histories, specialization, entry and exit data from the survey and feedback from the focus groups, suggest that the specialties listed above are in greatest demand and are thus currently valued more highly in the marketplace.

2. **Institutional Focus of Training:**

- Emphasize training programs for academic institutions. Long-term training resources should be channeled to those institutions which have consistently demonstrated their ability to make the most efficient use of graduates. This means increased emphasis on academic institutions, where the multiplier effects are also likely to be larger. Poor public administration practices and the lack of a professional civil service have decreased the value of long term training programs in many public sector agencies; many of these agencies have had difficulty placing their returning graduates and/or assigning them to positions where they are able to effectively utilize their newly acquired skills and knowledge. If training in the public sector must continue, USAID may wish to focus its resources on those organizations within the public sector which have made the most efficient use of graduates, such as the finance sector and marketing agencies.

- Continue supporting the training needs of the private sector. In the long run, most graduates have ended up working for private sector firms. USAID has already begun to focus increasing amounts of training resources on the private sector, using the Consejo Nacional de Hombres de Empresas as a screening institution.

3. **Selection of Candidates:**

- Greater effort should be made to achieve better gender balance. Selection criteria should continue to be based on merit and demonstrated commitment to the Dominican agriculture sector and its institutions, but a wider net can be cast to ensure a greater number of qualified female candidates.

4. **Support Services for Returning Graduates:**

- Improve access to continuing education for returned participants. USAID has invested heavily in human capital. However, much like investment in physical capital, maintenance and service are necessary to keep that capital machinery operating at its intended capacity. A little "service and maintenance" in the form of intensive short term courses or seminars given by visiting or local experts could substantially increase the value of past training and the contribution of returned participants to Dominican agriculture. The types of training which could be offered should be determined through an analysis of the most critical challenges facing Dominican agriculture and agro-industry. Such technical assistance and training could be organized under existing projects such as JACC/RD or ISA.

- Improve provision of pre-departure and post-scholarship orientation services by using an association of ex-scholarship recipients. USAID/DR outreach capabilities are limited: its HRD and ARD Divisions are already stretched in terms staff time available to organize and provide pre-departure and post-scholarship orientation for the participants. USAID already uses returned participants for such tasks, but this is done in an ad-hoc manner. Survey results and focus group feedback reflected a strong desire among returned participants to form a scholarship alumni association and to help organize the provision of these services.

- Link the formation of the returned participant association to current efforts to create a university alumni association. USAID is contributing to the formation of a US university alumni association organized under the auspices of the Instituto Cultural Dominico-Americano. In the context of this effort, returned agriculture training participants might form their own committee or related association. The Junta Agroempesarial de Consultoria y Coinversion (JACC/RD) has volunteered to follow up this suggestion by organizing a meeting of alumni in the coming year (1990). The long-term returned participant database created as part of this study could help build up such an association.

- Use an alumni association to provide women with a networking forum that could expand their opportunities to use their skills more effectively in a wider range of institutions.

1. OBJECTIVES OF THE STUDY

1.1 Between 1967 and 1989, the United States Agency for International Development in the Dominican Republic (USAID/DR), provided over 400 scholarships for academic training (BS, MS and Ph.D) in the United States and third countries in the area of agriculture. In 1989 USAID/DR commissioned a study to assess the impact of USAID graduate professionals employed in agro-related institutions, both public and private. The study also examined the extent to which institutions in both sectors have been able to utilize efficiently the resources and skills these graduates offer.

The study seeks to identify which types of institutions have demonstrated the greatest capability to support long-term training and which type of long-term training offers the greatest returns to both participants and the institutions in which they have been employed.[1]

The study highlights steps USAID/Dominican Republic can take in order to increase the value of training to institutions and graduates. It also explores how linkages between these graduates, their employers and the USAID Mission can increase the value of the training programs.

1.2 The study seeks to answer the following questions:

- Who are the returned participants; how have they progressed over time; and where and in what fields, institutions, and posts are they now working?
- How has the distribution of participants among institutions, fields of specialization and posts changed over time? What factors account for changing distributions?
- How are returned participants distributed between agriculture- and non-agriculture-related employment; how has this distribution changed over time; and what factors account for these changing patterns?

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[1]There have been a number of other studies to assess the impact of USAID training programs (see Appendix D -- Bibliography), but this has been the first study to focus entirely on the impact of long term training in agriculture and the first time that an effort has been made to trace the whereabouts of scholarship recipients in this area.

- Which institutions have experienced the highest retention rate of returned participants? What factors account for differences in retention rates among institutions?

- What has been the contribution of returned participants to the institutions in which they have been employed?

- What factors account for the differences in the perceived contribution of participants to the institutions?

- What types of linkages or mechanisms should exist among graduates and employers to increase the value of the training?

- What should the role of USAID be in facilitating and/or fomenting these linkages?

1.3 Sources of data for the assessment:

The information gathered for this study comes from two separate surveys.

1.3.1 Survey of Participants. A total of 250 persons who received graduate training in agriculture under USAID projects or programs since 1967 were interviewed.

This questionnaire was designed to provide updated data on each returned participant (including addresses, telephone numbers, places of work), and to produce a profile of all participants, including enough information on salary and job histories to estimate migration rates among various institutions, posts, fields of specialization and geographic locations over time.

1.3.2 Survey of agencies. A total of 37 institutions in the public and private sectors which had either employed or sponsored participants were interviewed. (See Appendix B, questions 2 and 3 for the description of the types of agencies contacted).

This questionnaire was designed to provide data on the benefits of various types of long-term training sponsored under USAID projects and programs; it also explored organizational salary and other incentive policies for returning participants.

1.4 A database on participants was created. On the basis of the data gathered from the studies J.E. Austin Associates (JAA) prepared a DbaseIII+ file which contains updated information on all the participants contacted during the study. A DbaseIII+ program was designed to enable the Agriculture and Rural Development (ARD) Office of USAID/Dominican Republic to maintain the database on participants and to do various types of searches. Though the DbaseIII+ program was designed only for use with the database file of long-term participants in agriculture, it can be adapted to include data on short-term participants and non-agriculture fields of study.

1.5 The report is organized as follows:

- Section 2 presents the methodology for gathering data from participants and agencies. This includes a discussion of the scope of the surveys, the construction of the sampling frames, and the stratification and sampling techniques. It also presents a discussion of the analytic tools used to analyze and interpret the survey results.

- Section 3 presents the major findings of the surveys, including a description of the characteristics of the samples.

- Section 4 summarizes the study's key conclusions and provides recommendations regarding future support for academic training for professionals, and for improving the efficiency and contribution of long-term training programs in agriculture.

2. STUDY METHODOLOGY

2.1 Design of the Survey Instruments

2.1.1 Questionnaires were carefully elaborated in terms of substance and language in collaboration with USAID/ARD personnel and local survey experts.

- A preliminary version of both questionnaires was prepared and submitted for review to the ARD Division a week prior to the start of the pilot survey and revisions were made in light of the Mission's comments and observations.

- A team of experienced local survey researchers reviewed the survey instrument prior to the pilot survey to ensure that the language was clear and that ambiguous terms were clarified. The questions were formatted so as to facilitate post-survey codification and data entry by using pre-coded responses.

- A copy of the Survey Questionnaire for Returned Participants is in Appendix A to this report. A copy of the Survey Questionnaire for the Institutions which have employed or sponsored these graduates is in Appendix B to this report.

2.2 Sampling Methodology

2.2.1 The sampling frame for both surveys relied on Mission documentation and files existing since 1967, such as papers concerning training in the agriculture sector, training programs, PIO/P's, and records and reports available in the Human Resources and the ARD divisions in Santo Domingo.

Information on field of study, degree, university giving the training, date of study, addresses and telephone numbers was extracted for all persons who had received long-term training under agriculture or related projects.[2] The data were incorporated into computerized DBaseIII+ files.

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[2]The project numbers included in the sampling frame were: 159, 160, 125, 126, 156, 214, 236, 144, 127, 157, 216, 186, 640, 179, 243, and 000 (PD&S) agriculture.

Since USAID records available in Santo Domingo were found to be incomplete, data from USAID files were supplemented with data from the Latin American Scholarship Program at American Universities (LASPAU), an organization which had managed a large number of long-term training contracts for USAID in the country. LASPAU provided the names of all Dominican participants who had studied in the US under various USAID agriculture-related projects and programs.

2.2.2 The final sampling frame for the participants contained a total of 440 names.[3] Less than 20 percent of the names in the list had updated addresses and/or telephone numbers (or other data which could be used to trace the participants).

The survey team attempted to contact all 440 persons in the final sampling frame. This effort lasted from August 25 to November 25, 1989. Many of the returned participants were able to provide information on the whereabouts of other returned participants. The Instituto Superior de Agricultura's (ISA) Alumni Association (known as AGISA) database was used to obtain updated information on many of the returned participants, since over 50 graduates from that institution had also received A.I.D. scholarships to continue their studies abroad. An advertisement was placed in the country's major newspaper towards the end of this effort in an attempt to reach all those participants for whom there was still no information available.

2.2.3 The survey team established the whereabouts of 403 persons (92% of the total universe of 440 participants - Table 1). It concluded that a total of 155 persons would not be available for interviews because they had died (7 out of the 155) or were still abroad, either

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[3]The total of 440 graduates sponsored by USAID/Dominican Republic since 1967 represents a substantial contribution to the country's graduate training in the agricultural and animal sciences. In comparison, 650 students have graduated from the university level program offered by the Instituto Superior de Agricultura (ISA) since 1968 (when it began offering a B.S. degree); 800 students have graduated in the agricultural or animal sciences from the Pedro Henriquez Urena National University (UNPHU) since its founding in 1966. The Autonomous University of Santo Domingo (UASD), the state university, initiated an agronomic studies program in 1962, but there was no data available on total number of graduates (enrollment in the agricultural sciences in 1989 was roughly 1,500 students).

studying (an estimated 100 of the 155) or working (48 people) outside the country.

2.2.4 A total of 250 were interviewed (Table 1). This represents 87.7 percent of the total number of participants available to be interviewed (285 people) in the country. Only 2 of those persons contacted by the survey team actually refused to be interviewed. The high proportion of participants contacted and interviewed assures that survey results are an unbiased representation of the universe of persons who studied abroad with USAID funds in the area of agriculture. It also reduces significantly the probability that the population parameters are not those of the sample.

2.2.5 The sampling frame for the agencies was drawn on the basis of information gathered from the participants during their survey. A total of 37 institutions were interviewed, including all the public and academic institutions in which the graduates have been working.

2.2.6 Both survey instruments were tested. A total of 9 persons and 4 institutions were included in the pilot survey. After the pilot survey was concluded the local survey team supervisors met with the JAA Team Leader and Survey Monitor to review pilot survey experiences and to go over necessary changes in light of these results. Only minor changes to the instrument were required, primarily in the codification of variables.

Two additional training sessions were held with the team of interviewers prior to beginning the full-scale survey. A total of 16 interviewers were trained, and 9 (the most experienced) accounted for 88 percent of all the interviews.

2.2.7 The local JAA Survey Monitor also contacted a random sample of nearly 10 percent of those reached by the survey team and verified that all interviews which were supposed to be conducted had been carried out satisfactorily.

2.3 Survey Analysis

2.3.1 All data were coded and entered by a team of experienced data coders and key punchers. It was processed and analyzed by JAA statisticians in Santo Domingo using SPSS, a common software used for statistical analysis in the social sciences.

2.3.2 Appendix A gives all the frequency distributions (and, where appropriate, the mean response) for responses to the Survey Questionnaire for Participants. Appendix B gives all the frequency distributions for responses to the Survey Questionnaire for Institutions.

2.3.4 The survey results were complemented by qualitative feedback gathered through a series of small focus groups. One session was held with representatives from the various institutions which had sponsored participants or were currently employing participants. Another gathered a number of returned participants working in various parts of the country and representing a wide number of fields of study.

2.3.5 The survey served to update the ARD files on all long-term training participants. A separate sheet asked all those contacted by the survey team to provide current addresses, telephone numbers and place of employment (Appendix A, pp. 23-24). These data will be entered into the DbaseIII+ file built for sampling purposes. A DbaseIII+ program was designed to facilitate the maintenance of this updated file.

3. RESULTS OF THE SURVEYS

This section presents data from the survey to address each of the key sets of issues highlighted in point 1.2.

3.1 Who are the returned participants; how have they progressed over time; and where and in what institutions, fields and posts are they now working?

3.1.1 Eighty percent of the graduates are male.

Exhibit 1 shows the distribution of participants by sex and year. It shows that female participation in long term training programs in agriculture is a fairly recent phenomenon; 77 percent of women have graduated since 1981 (and 40 percent since 1988), compared to 45 percent of the men.

3.1.2 The most popular fields of study have been agronomy (19 percent of all surveyed specialized in this area) and agricultural economics/agribusiness (18 percent of all graduates surveyed specialized in these fields). (See Exhibit 2).

Exhibit 2 also shows that some fields such as agriculture mechanization, horticulture/plant science and agronomy have had very few (if any) female graduates. Female graduates have tended to concentrate in food science (in which 13 percent of all female graduates specialized, compared to just 4 percent of the men) and agribusiness (in which 13 percent of women specialized).

3.1.3 Exhibit 3 shows that the distribution by field has changed somewhat over time, reflecting the changing training priorities of the Agency and the changing needs of the Dominican Republic. Prior to 1974 graduates were most likely to be in the fields of education/sociology (over 75 percent of the 13 graduates in this field graduated prior to 1974). Forestry has received emphasis only in more recent times; almost 80 percent of the 41 forestry graduates received their degree after 1982.

Eighty percent of participants received their degree from an institution in the United States (Appendix A, question 7).

3.1.4 Appendix A (question 10) shows that 90 percent of the participants were sponsored by the institution where they were working prior to departure.

3.1.5 On average, the mean salary upon return to work in the Dominican Republic increases in real terms. After controlling for year of graduation, sex, field of study and institution, regression analysis showed that salaries upon return were 5 to 10 percent higher than the salaries received prior to departure.

This is NOT, however, true for all types of participants. On average, salary differentials (the difference between the salary prior to departure and the salary received upon return) are **negative** for those who received a degree from a third country (other than the US).

The greater value given to a US degree may be related to the value of learning English (see point 3.5.1 below), perceived differences (by employers) in the quality of US and non-US graduates and/or because the US degree may have a higher "signaling" value for employers. In other words, it may be not only that the "mean" quality of US graduates is perceived to be higher but also that the variability of the quality of US graduates is also perceived to be lower (the distribution of US graduate quality is "tighter around the mean"); from the employers' perspective, the probability of picking a high quality US graduate is higher than the probability of picking a high quality non-US graduate and a higher salary may thus reflect the return to this greater predictive accuracy.

3.1.6 Salaries received by women are much lower than for male graduates (Table 2 and Exhibit 4). Table 2 also shows that there are no significant differences between the salary received by women before and after returning to the country. Women receive lower salaries irrespective of the field in which they work (Exhibit 4).[4]

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[4]Table 2 salary levels **prior** to departure appear to be higher for women. But over half of the female cohort in the study departed and graduated since the mid 1980s. Men's salary levels prior to departure on the other hand, are averaged over a longer time span, when salary and inflation were much lower. What is important in the table is to note that female salaries rarely go up as much as that of males **upon return.**

Regression analysis showed that on average women made over RD$ 770 a month less than men, even after controlling for factors such as number of years working, post, field of specialization, and type of degree obtained and place of study.

3.1.7 Table 2 shows that some fields pay much better than others. On average, mean salaries for graduates specializing in animal science, food science and agribusiness management/economics[5] are 3 to 15 percent higher than the average salary for all participants.

There have been some fields for which salary levels have improved dramatically over the last years. Table 2 shows that average salaries in fields such as horticulture and animal sciences/aquaculture have increased much more than those in fields which have traditionally been more remunerative (such as agribusiness/economics or soils). This may reflect in part the growing value of some specialties as the country's production structure changes. This is probably the case with horticulture. Salary increases for some specialties also reflect the fact that these graduates have been working longer and/or have a greater propensity to move to institutions where salaries are better. Thus large salary gains over time for sociology graduates reflect primarily the fact that most of these persons have been working longer (most education/sociology graduates obtained their degree in the 70s and early 80s - see Exhibit 3) and have been able over time to move into institutions or posts which paid better. Salary gains made by those in horticulture may in part reflect the fact that many tend to move out of public (and thus low paying) agencies and into the private sector (see Exhibit 5).

3.1.8 The mean salary received upon return also varies depending on the institution in which the participant began to work. On average, regression analyses which control for field, gender and year of study, show that real mean monthly salary is 40 to 50 percent higher for those who do not go back to their sponsoring institutions. Presumably, those who did not return to the same institution were able to "sell" their skills

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[5]The highest paying field according to Table 2 is agriculture mechanization. But since the total number of participants in this field is small, it is difficult to arrive at statistically sound conclusions on those who specialized in this field. Moreover, mean responses are easily skewed by a few "outliers" or abnormally high (or low) responses.

to the highest bidder, and the mean salary for this group is thus bound to be a better measure of the real "market" value of their degrees (see point 3.4.4 below).

3.1.9 Those who started with a higher salary have been able to maintain better remuneration levels over time than those which started with lower salaries. Regression analyses showed that, all other factors being equal, every peso gained in the last salary signified a RD$ 0.50 increment in present salary.

3.1.10 Approximately 30 percent of the graduates are currently working in public institutions, compared to the 46 percent who were working in public institutions when they returned from their studies. The proportion of graduates in public institutions is much higher for some fields than for others. Exhibit 5 shows how the distribution of graduates varies by type of institution and specialty. For example, whereas 44 percent of agronomy graduates still work in public sector institutions, only 4 percent of horticulture graduates continue to work in the public sector.

There has also been a net migration out of academic institutions, though at a lower rate than that experienced by public agencies. While 24 percent of graduates started working in academic institutions upon return, 19 percent remain in such institutions today (Exhibits 5 and 9).

3.1.11 Approximately 8 percent of all graduates now work in their own businesses. This "entrepreneurial propensity" varies by field of study. The proportion of graduates who now operate their own businesses is highest for those who specialized in horticulture than for all other specialties; 27 percent of all horticulture graduates report working in their own businesses, compared to 8 percent of all graduates (Exhibit 5).

The percentage of women who have their own businesses (4 percent) is much lower than that of male graduates (8 percent).

3.2 How has the distribution of participants among institutions and fields of specialization and posts changed over time? What factors account for changing distributions?

3.2.1 Few of the participants have remained in the public sector in the long run. As noted in point 3.1.10, 7 of every 10 returned participants are now working in some sort of private sector institution, whether it be for profit or non-profit. Exhibit 6 calculates the "migration rate" for various types of private sector institutions by taking the difference between the percentage of graduates who began working (upon return) in one type of agency and the percentage now working in the same type of agency. Private for-profit businesses, whether they be national or international, have gained the greatest number of graduates over time. Thus survey results suggest that in the long run, the Dominican private sector has benefited the most from the long-term training provided by USAID.

3.2.2 Women are much less likely to migrate from jobs and more likely to remain in public sector and academic institutions. Exhibit 7 shows how "migration" propensities, calculated on the basis of the number of times a graduate changes jobs, differ by gender of graduate. The proportion of male graduates with a high propensity to migrate is over twice as high (33) as that of women (15 percent). As Exhibit 6 shows, women tend to concentrate over time in the academic institutions (10 percent more female graduates are in those institutions today than the number which started working there upon completing their studies).

A much higher proportion of women have also remained in public institutions[6]. Job migration patterns and propensities may be partly explained by the fact that women are much less free to move about, in search of better paying job opportunities. But since most jobs in the country are located in a fairly concentrated geographic area (Santo Domingo), it is unlikely that restricted mobility explains most of the difference in migration patterns. A more likely explanation may be found in the fact that public and academic institutions offer much more flexible hours, and sometimes require

[6]This behavior explains in part (but, as noted above, not entirely) why salary rates for women are over 50 percent lower than those for men.

fewer hours per day, than other types of agencies.[7]

A lower propensity to change jobs also explains in part why women's salaries are less than those of men. Regression analyses show that, after past salary, the best predictor of present salary level is the number of jobs a person has held. All other factors being equal, such as date of graduation, type of institution, degree, geographic location of job, and gender of participant, every job change represents an additional RD$ 253 per month for the graduate.

3.2.3 Many graduates have migrated into fields related to agribusinesses. Exhibit 8 shows that migration rate by area of specialization. Within agriculture- related fields there has been a net gain only for the agribusiness field (3 percent increase in the number of graduates currently in this field compared to the number that started out). Table 2 shows that salaries in the agribusiness field have traditionally been higher. The increased concentration in this area may also reflect the growth of the Dominican agribusiness sector over time. Thus, it is not only that jobs in agribusiness pay better, but that there may be more job openings in agribusiness.

The largest net loss of graduates has been in the agronomy specialty. On average, 3 percent fewer graduates are currently working in this field than started working in it upon completion of their studies.

3.2.4 Graduates tend to migrate into administrative and marketing positions over time. Exhibit 9 shows the migration rate among different types of posts for selected fields of specialization. On average, 9 percent more graduates are currently working in administrative positions than who started in this position upon completing their studies. The largest net loss has been experienced in teaching and academic positions, where there are now 27 percent fewer graduates working compared to the number which started in this post. In part such patterns are explained by job seniority. The natural pattern in many technical fields, including education, is to move into administrative positions over time.

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[7]For example, government agencies typically begin working at 7:30 AM and end by 2:00 PM. Academic institutions, such as universities have much more flexible schedules and vacation times than other private sector institutions.

3.3 How are returned participants distributed between agriculture and non-agriculture related employment; how has this distribution changed over time; and what factors account for these changing patterns?

3.3.1 The majority of graduates (82 percent) remain in agriculture related fields. Exhibit 8 shows that the net migration into non-agricultural fields has been just 7 percent. It also shows that women tend to migrate into non-agriculture areas at the same rate as men.

The remuneration rate in non agriculture related employment, as shown by the mean salary which is obtained over time by graduates in this sort of activity, (Table 2) has not been higher than for many agriculture-related areas. Thus, despite the widespread perception in the Dominican Republic that "agriculture does not pay," survey results suggest that many agriculture related fields have managed to remain competitive in terms of remuneration and do retain a substantial number of graduates.

3.3.2 Over two thirds of those who plan to change jobs in the future, wish to remain in agriculture-related fields.

3.4 Which institutions have experienced the highest retention rate of returned participants? What factors account for differences in retention rates?

3.4.1 Approximately, 56 percent of all graduates return to their sponsoring institutions (Exhibit 10). On average, the graduate stays 25 months in the institution where he/she began working upon return (Exhibit 11).

3.4.2 Academic institutions have been most successful in retaining those they sponsor. While 65 percent of all graduates sponsored by the public sector return to their sponsoring institution, 90 percent of those sponsored by academic institutions return to these institutions upon completing their studies (Exhibit 10). Moreover, those who return stay twice as long in academic institutions (51 months) than in other types of agencies (Exhibit 11). Nevertheless, as shown in Exhibit 6, there is a net loss of participants overall in the long run (though there is a net gain of female graduates) in academic institutions.

Within public institutions, the percentage of returning graduates was highest for those organizations involved in services such as finance and marketing[8] (77 percent of graduates sponsored returned) and lowest in those institutions concerned primarily with agro-processing[9] (27 percent of graduates sponsored returned). The length of tenure was also the longest for services institutions (average length of stay 38 months) and lowest for agro-processing (8 months).

3.4.3 Low retention rates in the public sector are explained in part by poor personnel administration practices and the politicization of civil service jobs. Focus group feedback revealed that political transitions which occur while participants are away studying often leave them "orphaned" upon return, forcing the graduate who may wish to come back to fulfill his/her commitment at their sponsoring institution to look elsewhere for employment. Moreover, limited opportunities for merit-based advancement result in high dissatisfaction and disenchantment in the public sector returnees. Finally, those who return and are able to find a place in their sponsoring institution often find that they are not able to use what they learned because their work bears little relation to their area of study, or because their superiors, feeling threatened by their newly acquired capabilities and knowledge, tend to marginalize them.

Survey responses back these focus group observations. Survey results show that the most common reason for participants to leave their sponsoring institutions was to look for better opportunities to use their skills and advance professionally (41 percent).

It is clear from point 3.4.2 above however, that the degree of turnover varies considerably within public sector institutions; the finance and marketing sector seem to experience fewer difficulties retaining graduates than do other types of public institutions.

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[8]This category includes institutions such as the Banco Agricola in finance and the Instituto de Estabilizacion de Precios (INESPRE) in marketing.

[9]This would include institutions such as CEA which runs the various sugar mills.

3.4.4 Salary differentials also explain the difference in migration rates among graduates. As noted above, the best predictor of salary is the number of times a person has changed jobs; those with a higher propensity to migrate have significantly higher salaries than those who have a lower job migration propensity.

Salaries offered by sponsoring institutions are not competitive with those offered elsewhere. As shown in Table 2, those who do not return to a sponsoring institution have salaries which are 40 to 50 percent higher than those who go back to work in their sponsoring institutions. Though most sponsoring institutions do offer graduates a salary increase upon return (60 percent of the graduates reported receiving some sort of a salary increase upon return to their sponsoring institution), simply having a salary incentive policy is not sufficient to retain graduates. Salaries must be competitive.

As Table 2 shows, sponsoring institutions do not pay competitive wages. The value placed on graduates by the sponsoring institution is much lower than their true market value because these returning graduates are not truly "free" to sell their skills in the open market. Many sponsoring institutions have agreements (moral or otherwise) with these graduates, which essentially "tie" them to the institution upon return. Once their commitment is over (generally 24 months), graduates will naturally migrate to those agencies where they are able to command what they are worth.

Exhibit 11 shows that graduates stay in most sponsoring institutions on average just a few months beyond the normal expected "payback" period of 24 months and then tend to move into private sector organizations, taking with them their knowledge, skills and several years of on the job experience. On the other hand, graduates tend to stay in academic institutions for much longer periods of time (51 months).

3.5 What has been the contribution of returned participants to the various institutions in which they have been employed?

3.5.1 According to employers, the most important benefit provided by the training is improvement in the quality of the graduate's work. Exhibit 12 shows that over 90 percent of institutions where participants work notice improvements in the quality of the work done by the returnees.

Relative to other types of benefits, improvements in the knowledge of English is not one of the most important benefits for the institutions. Less than 50 percent of institutions cite improvement in English language skills as a key benefit of training programs. Private sector institutions are more slightly more likely to prize English language skills learned abroad than public sector institutions (40 percent of private institutions see this as an important benefit of training abroad, compared to 33 percent of public sector institutions). Within public institutions, those operating in the services sector are more likely to believe English language training has been valuable (31 percent of these institutions believe this has been an important benefit of the training) than those which operate in agriculture production or agro-processing (22 percent). Private sector institutions operating in agro-processing and production, however, are more likely to value English language training higher (40 percent believe that this has been an important benefit of participant training) than those operating in the service sector (31 percent believe that this has been an important benefit).

In contrast, 74 percent of the participants themselves see this as one of the most important aspects of their training (question 14 Appendix A). Hence improvements in English language skills are much more prized by the graduates than by the institutions in which they return to work.

Salary differentials between US and non-US based degrees suggest that English language skills do have a positive value in the job market.

3.5.2 Long-term returned participants are believed to contribute significantly to improvements in the productivity of the organization. Exhibit 12 shows that approximately 50 percent of the institutions surveyed believe that graduates contribute significantly to improvements in the overall productivity of the organizations in which they work.

Perceived productivity benefits vary substantially among types of institutions. Exhibit 12 shows that fewer public sector agencies believe graduates contribute to increasing the organization's productivity (40 percent) than private institutions (50 percent).

Within public institutions, 69 percent of those operating in the services sector believe participants

contribute to increased organizational productivity, compared to under 40 percent of other types of public sector institutions.

3.6 What factors account for the differences in the perceived contribution of participants to the institutions?

3.6.1 Some institutions do not retain their graduates long enough for them to "make a difference." If a graduate stays only a short period of time, his/her perceived contribution is likely to be less.

Survey responses show that those institutions where the graduate's length of stay is the shortest (i.e. public agro-processing organizations, where the average length of stay is 8 months) are the least likely to perceive that the graduate has contributed to the organization's productivity (only 57 percent of the 9 institutions which reported operating in the agroprocessing sector believe that graduates have been able to contribute to productivity, compared to 69 percent of public service sector institutions where the average length of stay is 38 months).

3.6.2 Public sector institutions are less able to offer graduates an opportunity to apply their new skills and knowledge. Responses to other parts of the survey and focus-group feedback reflect this. For example, the proportion of participants who reported that they were either never or rarely able to "make good use of their acquired skills" in their sponsoring institutions is much higher for those working in public institutions (34 percent) than in private ones (8 percent).

3.6.3 Employers do not value all types of long-term training equally. Perceived differences in the contribution of graduates to an institution may also be related to the types of graduates these institutions hire. Exhibit 13 shows that there are significant differences in the perceived quality of USAID graduates (compared with locally trained persons) in various fields. In particular, the difference in the quality of a graduate with a foreign degree and one with a local bachelor's degree is generally perceived to be lower than the difference between the quality of a foreign and a local master's degree. Only a minority of respondents feel that at the BS level foreign trained agronomists and sociologists and educators are superior to locally trained ones. Thus institutions which hire a greater proportion of persons with BS degrees, and degrees in

certain fields (such as agronomy and sociology/ extension) might be less likely to feel that the graduates had anything to "teach" the local staff, though the degree may have indeed contributed to an overall improvement to that person's own productivity. Foreign trained agronomists and sociologists are more likely to be employed, and remain employed, in public sector institutions than are those from other specialties; public institutions also employ a higher proportion of returned participants with a foreign BS than other types of sponsoring institutions (Appendix B, question 19); thus, these institutions may also be more likely to perceive that "their" foreign graduates have less to offer or teach others in the organization.

3.7 What types of linkages or mechanisms should exist among graduates and employers and USAID/DR to increase the value of the training?

3.7.1 <u>There is a strong demand for short seminars, courses and technical trips and visits to help graduates keep up to date with the latest advances in their fields</u>. Participants feel that locally available opportunities to keep up to date with the skills and knowledge obtained abroad are limited. Focus group feedback indicated that access to such "continuing education" opportunities would enhance the value of their training.

3.7.2 <u>There is a high degree of interest among graduates in forming an association of ex-scholarship recipients</u>. Over 96 percent of the graduates interviewed expressed an interest in belonging to such an association (Appendix A, question 58). Graduates already maintain a high degree of contact with other participants. Ninety-two percent of the graduates report keeping in some sort of contact with other returned participants (Appendix A, question 57). And indeed the survey team found that some of the best sources of information concerning the whereabouts of former beneficiaries of long-term participant training were other beneficiaries. Many friendships and contacts made with other Dominicans abroad endure.

3.7.3 <u>Returned participants think that an association which would help participants adjust to life abroad and adjust upon return to the country would be "most useful."</u> Exhibit 14 shows the level of interest in 5 basic types of services which could be offered by an association of returned participants. Returned

participants showed the most interest in pre-departure orientation services (over 83 percent thought this service would be "very useful") and post-return orientation (over 78 percent believed this service would be "very useful"). Focus group feedback suggested that some of the activities which could be offered as part of the "reorientation upon return" could include continuing education courses to maintain graduates abreast of the latest developments in their fields. A number of "pre-departure" orientation activities already take place, both in Santo Domingo and in the United States. However, returned participants expressed an interest in augmenting these sessions with the experiences and observations of those participants in similar programs and institutions who had returned recently from their studies abroad.

3.8 What should the role of USAID be in facilitating these types of linkages?

3.8.1 The best implementing vehicle for the types of services demanded by the graduates, including some sort of continuing education services, would be an association of ex-scholarship recipients. The fact that USAID has remained in contact with so many of its former scholarship recipients, suggests that USAID's best role may be as a catalyst, providing moral support and information to those who are interested in forming such an association.

Over 60 percent of all returned participants interviewed have remained in contact with USAID. Much of that contact (47 percent) has had to do with scholarship related matters (Appendix A, questions 52, 53 and 54).

Over 96 percent of all returned participants interviewed have expressed an interest in maintaining some contact with the Mission (Appendix A, question 55). Hence there is a strong base of interest among those sponsored in keeping in touch with their former sponsor.

The updated database file on all the recipients of USAID scholarships produced as a result of this study would provide a nascent association with a rich resource base with which to start.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions:

4.1.1 **Long-term participant training programs in agriculture have brought real benefits both to the recipients of scholarships and to the institutions in which they work.** On average, participants have enjoyed real salary increases of 40 to 50 percent upon return. Participants today receive, on average, monthly salaries ranging between RD$2,400 to RD$4,000. Graduates have, in many instances, gone on to hold important posts in government (3 have been Secretary of Agriculture) and in private enterprise. Over 90 percent of the institutions employing these participants have noted significant increases in the quality of their work and two thirds believe they are benefitting from the skills and knowledge brought back by the graduates.

4.1.2 **Remuneration benefits received by participants and perceived benefits from training received by institutions vary by field and type of degree.** The structure of the Dominican economy has changed substantially since 1965. The demand for various types of training changes over time, as suggested by the migration of graduates in and out of various fields and institutions. As a result, the benefits of long-term training for the participant vary by type of degree and field of specialization over time. Moreover, locally available training in many areas has improved substantially. Generally, from the point of view of employers today, perceived benefits in terms of quality of work and productivity are lower for those foreign graduates receiving bachelor's degrees than for those receiving graduate degrees. Benefits are also perceived to be lower for those foreign graduates specializing in sociology and agronomy than for those specializing in other fields. These results suggest that long-term training abroad in some areas may no longer be necessary.

4.1.3 **Academic institutions have been able to make the most efficient use of their graduates.** Academic institutions have been able to place a higher proportion of their graduates upon return and to retain them for longer periods of time. Success is not

necessarily measured by institutional retention rates. However, institutional loyalty and sponsorship play roles in avoiding an unintended "brain drain" effect through legal and illegal immigration into the US and other countries. In addition, multiplier or diffusion effects of training have been highest in academic institutions; these institutions are most likely to encourage knowledge and skills transfer due to the nature of their activities. Hence, participants returning to public institutions are twice as likely to report that they have not been able to use their skills upon return than those graduates returning to either academic or private institutions.

4.1.4 **Public sector institutions operating in services (such as finance and marketing) have made more efficient use of their graduates than other types of public sector institutions.** Public sector institutions in the services sector are more likely to find a position for their graduates and retain them in the institution for longer periods of time than are other types of public sector agencies.

4.1.5 **Long-term training in agriculture has produced and continues to produce real benefits for the Dominican agriculture sector.** Survey results show that even if most graduates have chosen to leave the public sector, over 80 percent continue to work in the agriculture sector.

4.1.6 **Women have benefitted less from the long-term training programs than have men.** Less than one fifth of all participants have been women. Women receive lower salary benefits upon return and lower salaries persist throughout their careers. Women also seem to have limited opportunities to migrate from jobs and tend to remain in those types of institutions which are less dynamic and use the skills of their graduates less efficiently (public sector agencies). Thus women may not be able to use their newly acquired knowledge and skills as effectively as men. Lower migration out of the public sector may be a matter of choice, but may also be due to the fact that women lack an effective network of contacts which facilitate transfers and hinder their ability to reach positions with real decision-making power.

4.1.7 **Candidates need better pre-departure and post-scholarship return orientation.** Focus group feedback indicated that current USAID programs in this regard are not perceived as adequate.

4.1.8 **Participants feel that the opportunities to keep up to date with the skills and knowledge obtained abroad are limited.** Focus group discussions revealed that there was strong demand for short seminars, courses and visits to help them keep up to date with their fields of specialization.

4.2 Based on the results of the surveys and the focus group feedback, the following actions are recommended for long-term participant training programs in agriculture:

4.2.1 **Kind of Training:**

- Focus participant training programs in those degrees and areas for which there are no perceived adequate substitutes locally. Such specialization would increase the returns to training for both the participants and the sponsoring agencies. The Mission's decision to discontinue Bachelor's degree training abroad is warranted given the survey results, since less than one third of respondents believed that this type of training should be given abroad.

- De-emphasize training in agronomy and emphasize training in management, agricultural marketing, plant pathology, pest management, horticulture, mechanization, and natural resource conservation. The purpose of this study was to determine the impact of training programs on the agriculture sector and not to conduct a needs assessment. Nevertheless, the salary histories, specialization, entry and exit data from the survey and feedback from the focus groups, suggest that the above are in greatest demand and are thus currently valued more highly in the marketplace.

- Develop training programs and strategies which are flexible and responsive to changes in priorities and institutional needs. Survey results show that the highest returns for training occur for both the graduate and the institution when the graduate is able to migrate to those institutions where his/her skills are most valued and thus most likely to be used.

Likewise, training programs which "lock-in" graduates and institutions into particular skills or specialties may in the end not be beneficial to either. This means that academic training programs should be as short as possible (at most two years; thus master's programs are in this sense the most desirable) and allow for "mid-course" corrections (hence avoid programs which lock institutions into a given number of graduates in specified specialties). It also means that training programs should be designed to allow exchanges of graduates between sponsoring institutions, rather than locking the graduate in one institution over a pre-specified period of time. If a graduate cannot be used in SEA or in Company X, for example, cooperative arrangements between institutions might be developed whereby the graduate could then be transferred easily to another agency where his/her skills are required. **This might require the development and maintenance of a job bank or placement clearinghouse, perhaps managed by an alumni association.**

4.2.2 **Institutional Focus of Training:**

- Focus training resources on academic institutions. The Dominican public sector needs training, but the survey results strongly suggest that, given the present system of public administration, such resources are not being used efficiently. Thus, until such personnel administration problems can be effectively addressed by the GODR, long term training resources might be best concentrated on those institutions which make the most efficient use of graduates, particularly academic institutions, where the multiplier effects are also likely to be larger.

- Focus training in specific types of public service sector agencies. If training in the public sector must continue, USAID may wish to put emphasis and resources in those organizations within the public sector which have made the most efficient use of graduates, such as the finance sector and marketing agencies.

- Continue supporting the training needs of the private sector. USAID's long-term training programs were originally targeted almost exclusively to public sector institutions, reflecting in part a general development policy of working with and through the public sector. 20 years ago the private sector was small and weak; over the years the Dominican private sector has grown substantially and the entrepreneurial base has widened. Migration of graduates into the private sector both

reflects and supports the changing economic structure of the country. USAID has already begun to focus increasing amounts of training resources in the private sector, using the Consejo Nacional de Hombres de Empresas as a screening institution.

As training for the private sector expands, USAID must expect different retention patterns than have existed in the past. An important part of USAID's project design had been the sense of commitment and loyalty to the local institution which provides sponsorship to the candidate. Survey results suggest that institutional sponsorship resulted in a relatively high return rate of graduates. Retention rates have been much lower, as the survey shows, for those sponsored by private sector institutions. Private sector priorities are different from those of the public sector; bonds between participant and sponsoring institutions are bound to be weaker.

4.2.3 Selection of Candidates:

- Greater effort should be made to achieve better gender balance. Previous training has been skewed toward male participants, reflecting in part the historical dominance of males in agriculture related fields in the Dominican Republic. Recent data show marked improvement in the number of women in agriculture-related training; this trend needs to be strengthened further in future training programs. Selection criteria should continue to be based on merit and demonstrated commitment to the Dominican agriculture sector and its institutions; however, a wider net can be cast to ensure a greater number of qualified female candidates, perhaps by working more closely with the growing number of professional women's associations in the country in recruitment efforts.

4.2.4 Support Services for Returning Graduates:

- Provide access to continuing education for returned participants. USAID has invested heavily in human capital. However, much like investment in physical capital, maintenance and service are necessary to keep that capital machinery operating at its intended capacity. A little "service and maintenance" in the form of intensive short-term courses or seminars given by visiting or local experts could substantially increase the value of past training and the contribution of returned participants to Dominican

agriculture. The types of training offered could be determined through an analysis of the most critical challenges facing Dominican agriculture and agro-industry. Such technical assistance and training could be organized under existing projects such as JACC/RD or ISA.

- Improve orientation services provision by using an association of ex-scholarship recipients. USAID outreach capabilities are limited; the HRD and ARD Divisions are already stretched in terms staff time available to organize and provide pre-departure and post-scholarship orientation for the participants. USAID already uses returned participants for such tasks, but this is done in an ad-hoc manner. Survey results and focus group feedback showed a strong desire to form a scholarship alumni association, which could take the lead in organizing the provision of these services.

- Link the formation of the returned participant association to current efforts to create a university alumni association. USAID is currently promoting a US university alumni association organized under the auspices of the Instituto Cultural Dominico-Americano. In the context of this effort, returned agriculture training participants might form their own committee or related association. The Junta Agroempesarial de Consultoria y Coinversion (JACC/RD) has volunteered to follow up on this suggestion by organizing a meeting of alumni in the coming year (1990). The long-term returned participant database created as part of this study could help build up such an association.

- Use an alumni association to improve the networking opportunities of female returned participants. An alumni association could provide women with precisely the sort of effective networking forum necessary to improve their access to a wider range of institutions.

TABLE 1
SURVEY SAMPLING RESULTS

	TOTAL
Total in universe	440
Total contacted	403
Unavailable for survey	155
-Deceased	7
-Abroad Studying	100
-Abroad other	48
Available for survey	285
Total Surveyed	250

87.7 % of total available for survey were interviewed

TABLE 2
GRADUATE SALARY HISTORY
BY SEX, TYPE OF DEGREE, AND FIELD OF STUDY
(In nominal RD$/month)

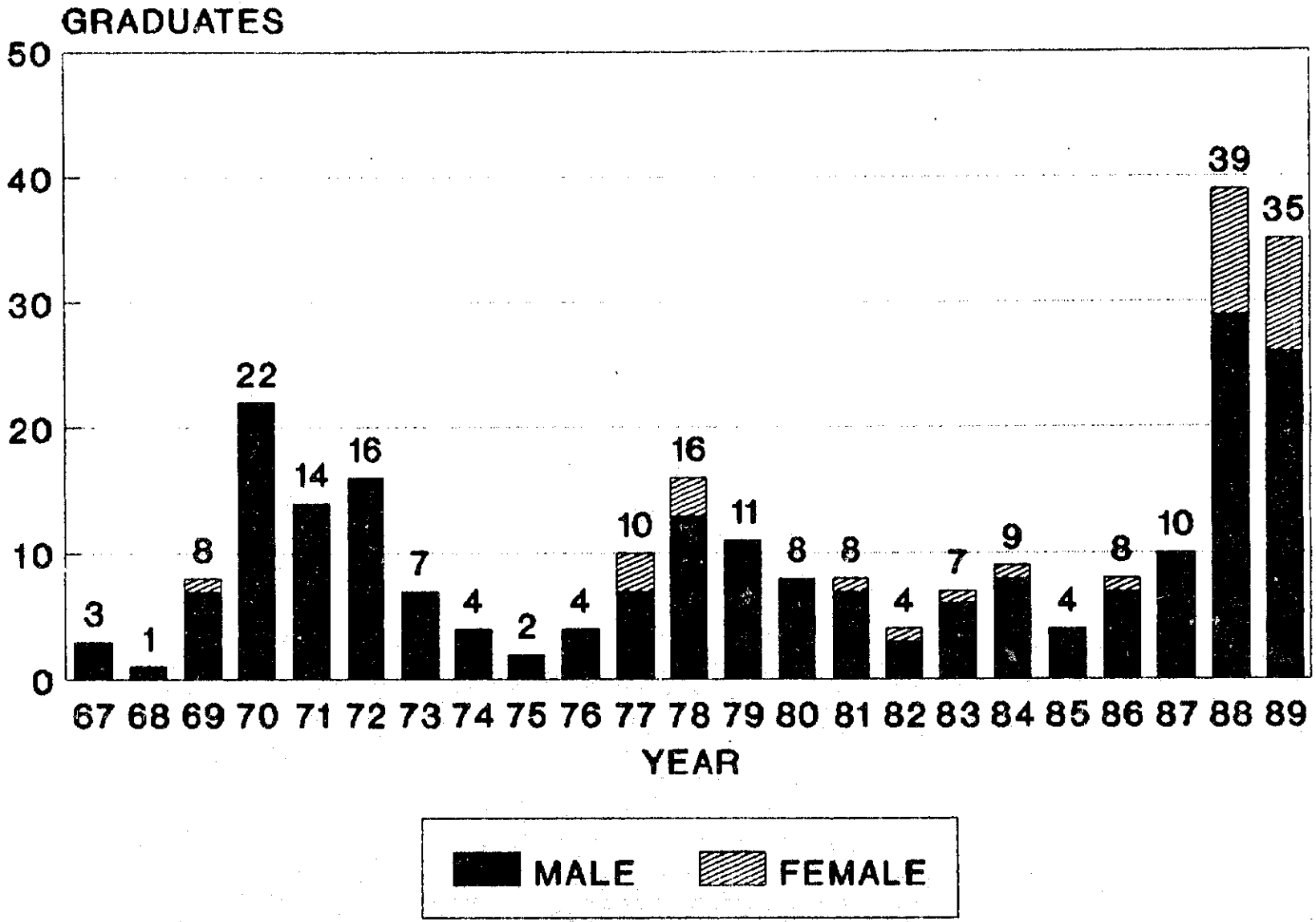
PARTICIPANT CHARACTERISTIC	Mean Prior Depart.	Mean Upon Return (Sp.)*	Mean Return (Non-Sp.)**	Mean Present Salary
Men	561	719	1,084	3,129
Women	654	648	907	1,824
Studied in US	553	718	1,088	3,188
Studied in PR	475	635	734	2,448
Studied other	666	649	996	2,394
Econ/Agribus.	759	920	1,210	3,397
Forestry	595	682	697	2,612
Food Science	334	380	721	3,244
Soc/Education	208	92	603	2,761
Animal Science	467	590	858	3,640
Agronomy	446	575	1,079	2,762
Soil Science	786	939	1,148	2,523
Horticulture	370	463	645	3,091
Mechanization	360	500	1,130	4,860
Non Agric.	749		1,438	2,451
All	570	711	1,062	3,156

* REFERS TO THOSE PARTICIPANTS WHO RETURNED TO THE SPONSORING INSTITUTIONS.

** REFERS TO THOSE PARTICIPANTS WHO DID NOT RETURN TO A SPONSORING INSTITUTION.

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

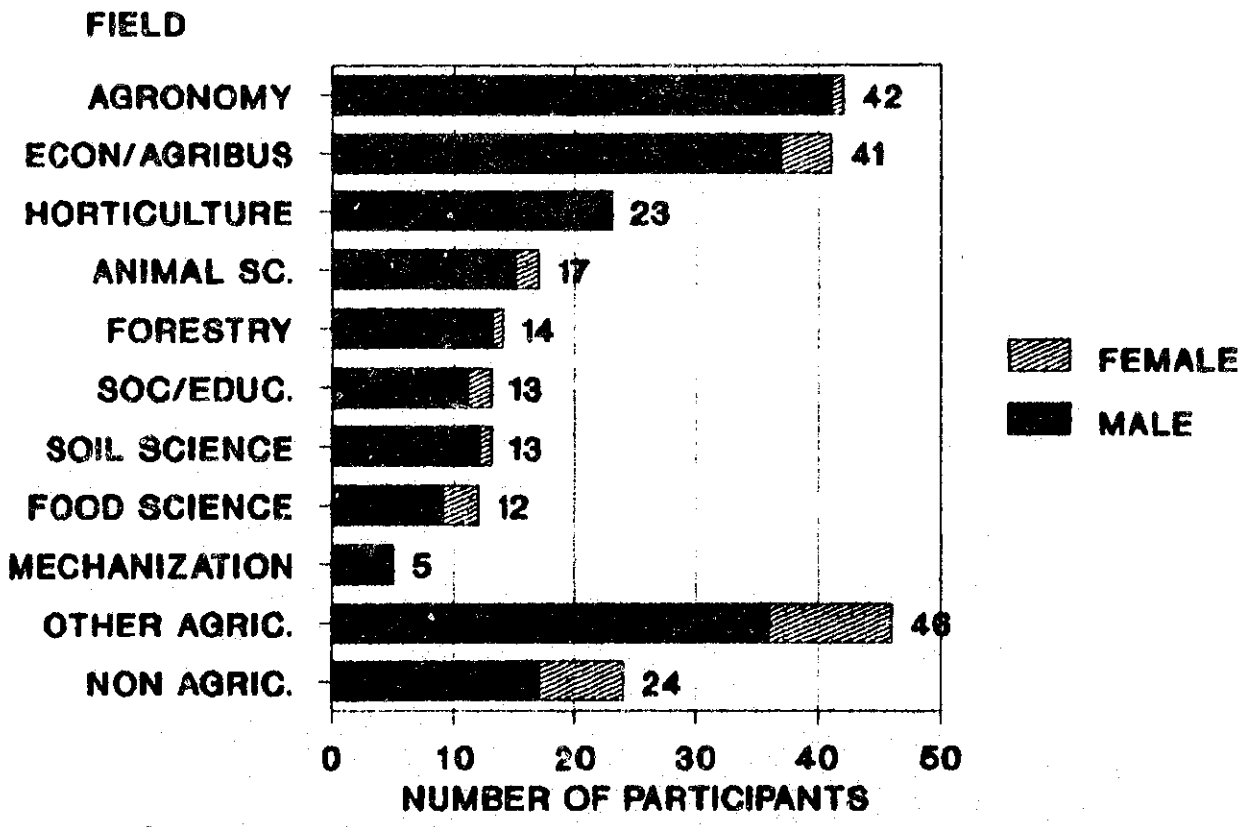
EXHIBIT 1
NUMBER OF PARTICIPANTS BY GRADUATION YEAR



Participants Questionaire
Question 4

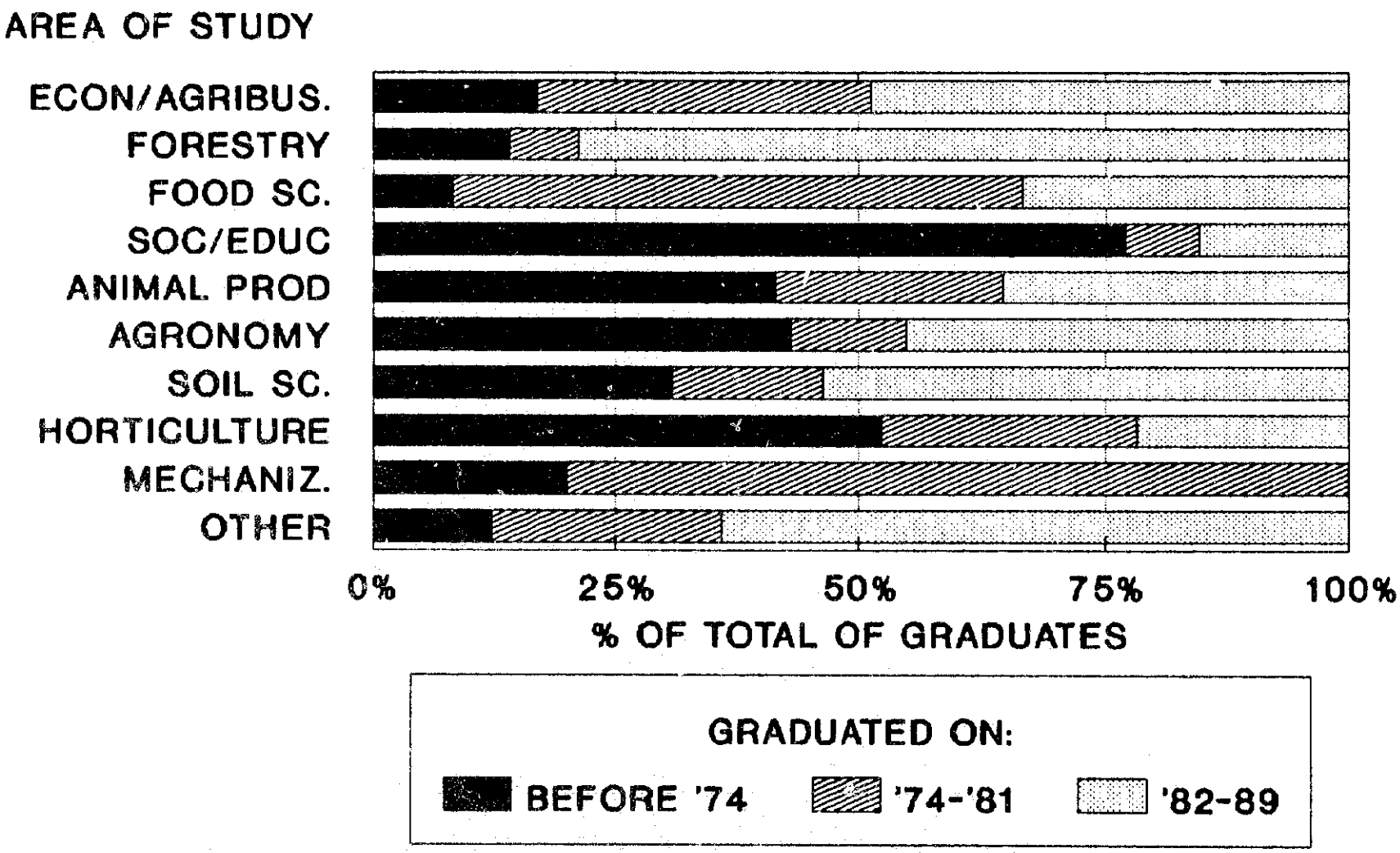
IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

EXHIBIT 2
FIELDS OF SPECIALIZATION



Participants Questionnaire
Question 1

EXHIBIT 3
GRADUATES' FIELD OF SPECIALIZATION BY PERIOD



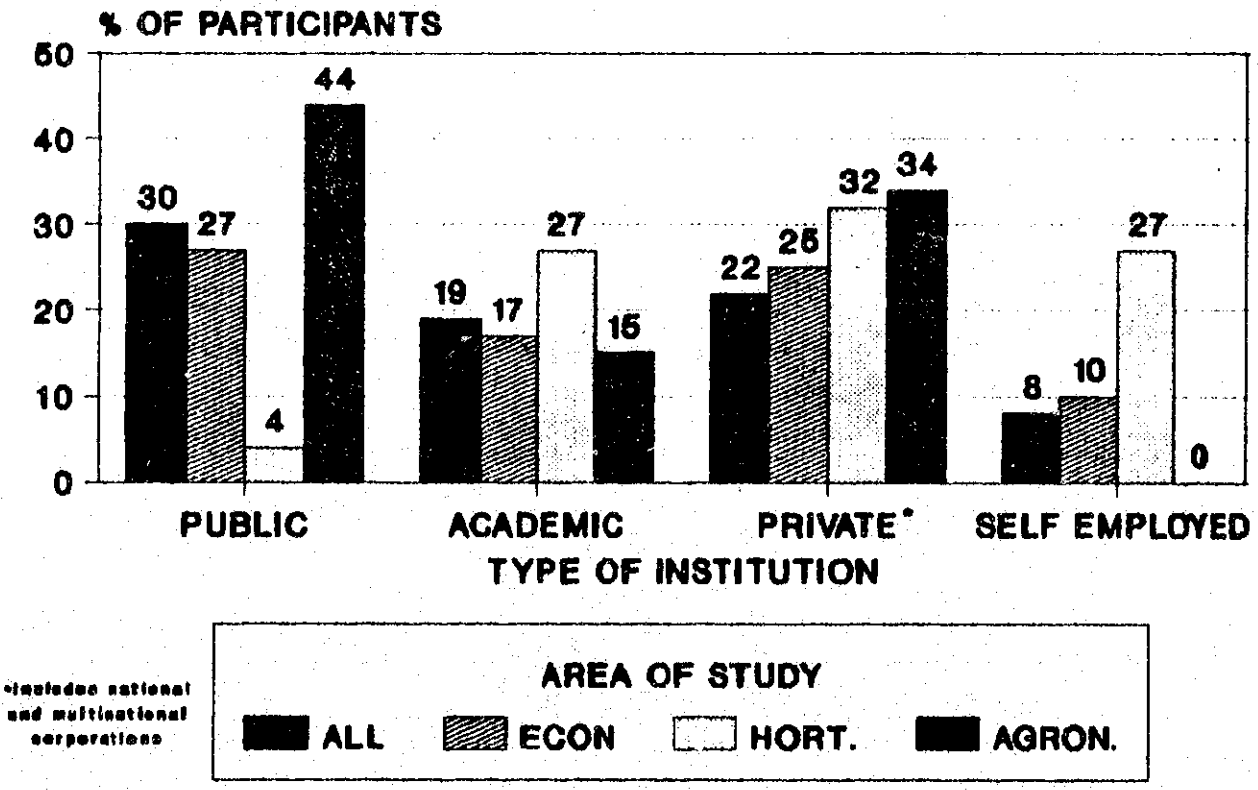
Participants Questionnaire
Questions 11 and 4

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

EXHIBIT 4
CURRENT SALARY BY FIELD AND SEX (RD$/MONTH)

FIELD	*MALE*	*FEMALE*
MECHANIZATION	4,860	N/A
FOOD SCIENCE	4,614	1,542
ANIMAL SCIENCE	3,847	1,337
SOIL SCIENCE	3,587	1,100
ECO/AGRIBUS.	3,544	3,387
HORTICULTURE	3,497	3,100
SOC/EDUCATION	3,367	3,000
FORESTRY	3,020	1,278
AGRONOMY	2,685	1,200
NON-AGRIC.	2,764	1,301

EXHIBIT 5
WHERE PARTICIPANTS WORK TODAY
BY FIELD OF SPECIALIZATION

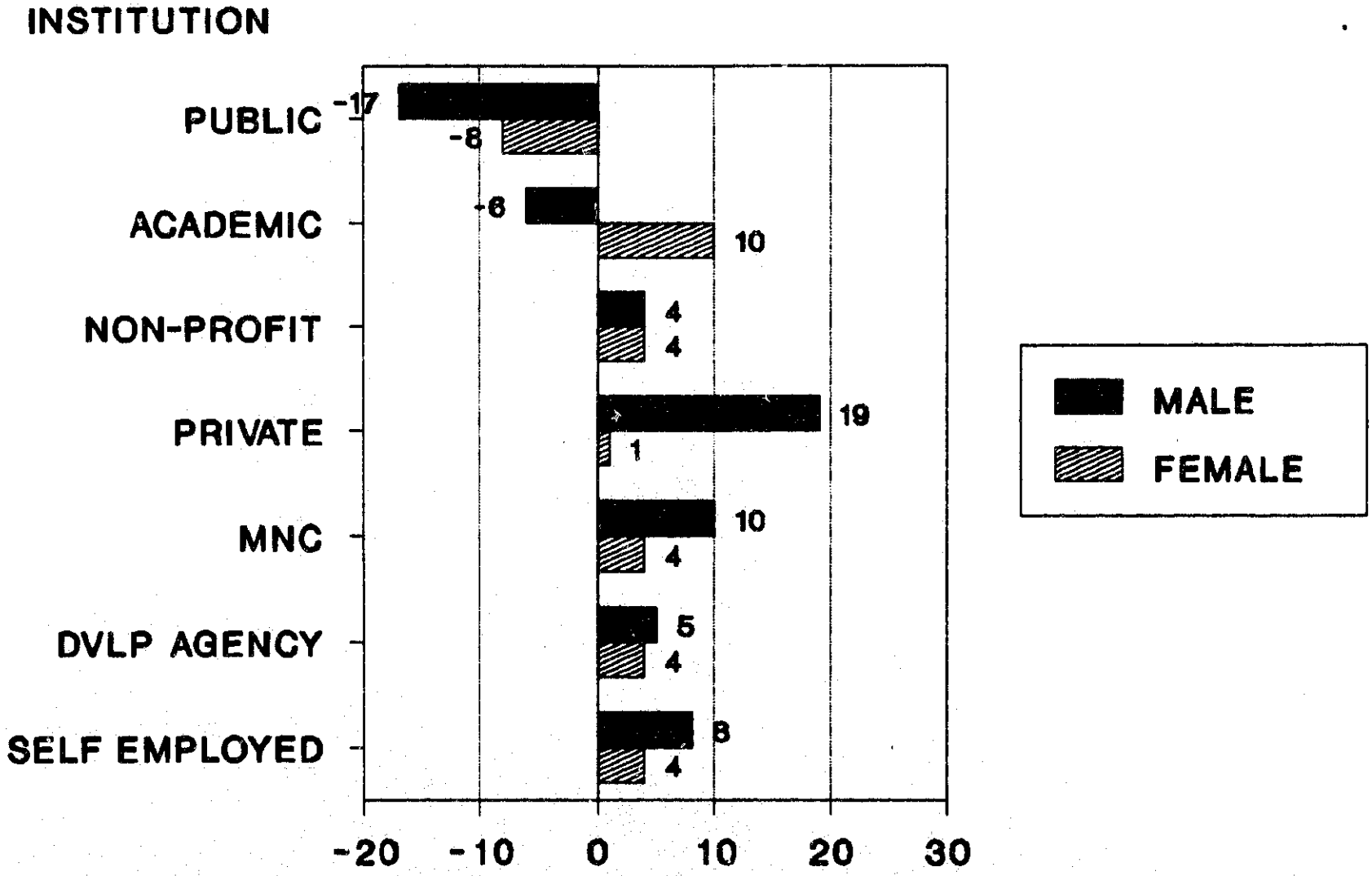


*includes national and multinational corporations

Participants Questionnaire
Questions 11, 15 and 37

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-82

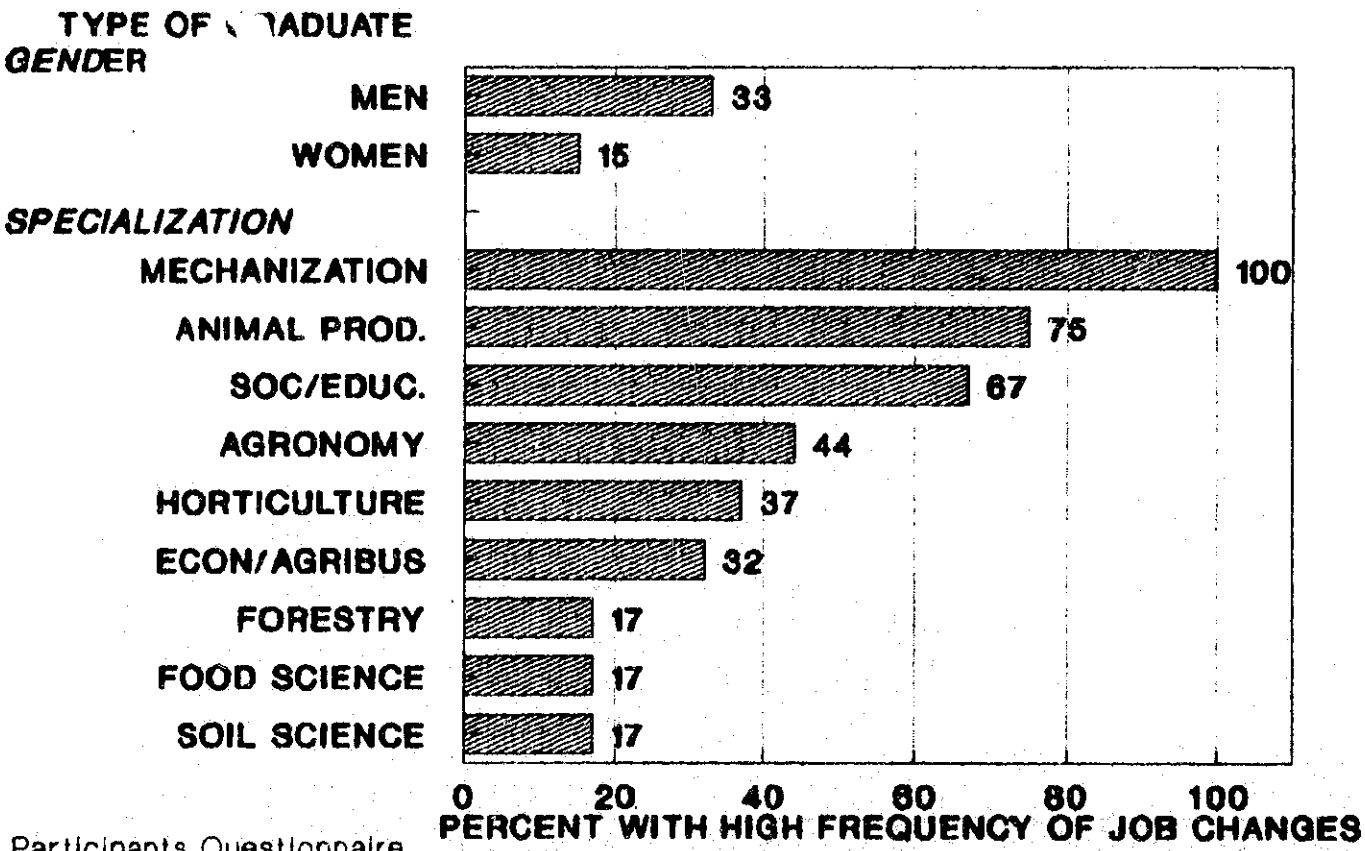
EXHIBIT 6
INSTITUTIONAL MIGRATION



Participants Questionnaire
Questions 1, 20, 26 and 37

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

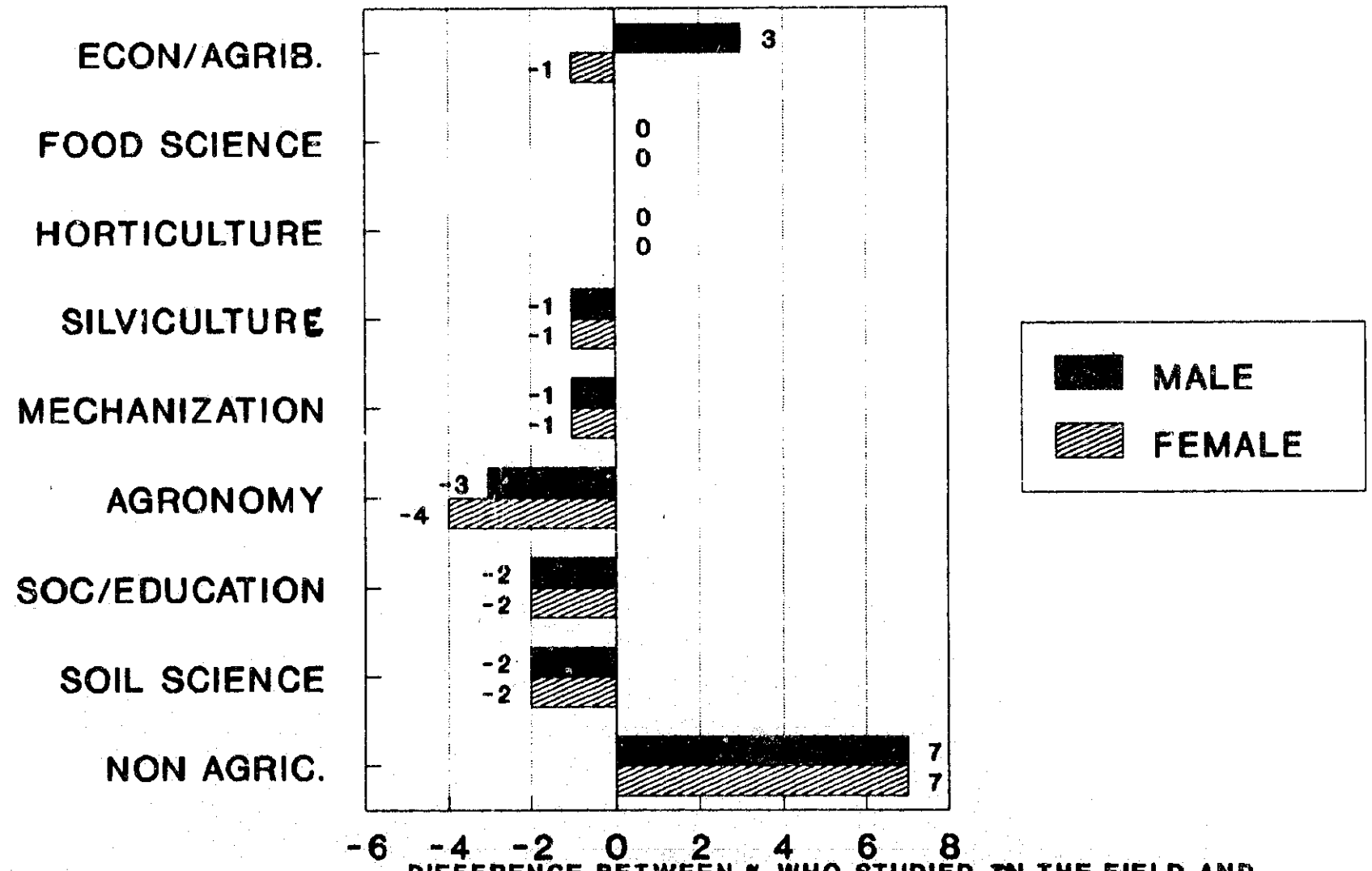
EXHIBIT 7
EMPLOYMENT CHANGE



Participants Questionnaire
Questions 20, 26 and 36

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

EXHIBIT 8
FIELDS STUDIED VS FIELDS OF CURRENT EMPLOYMENT

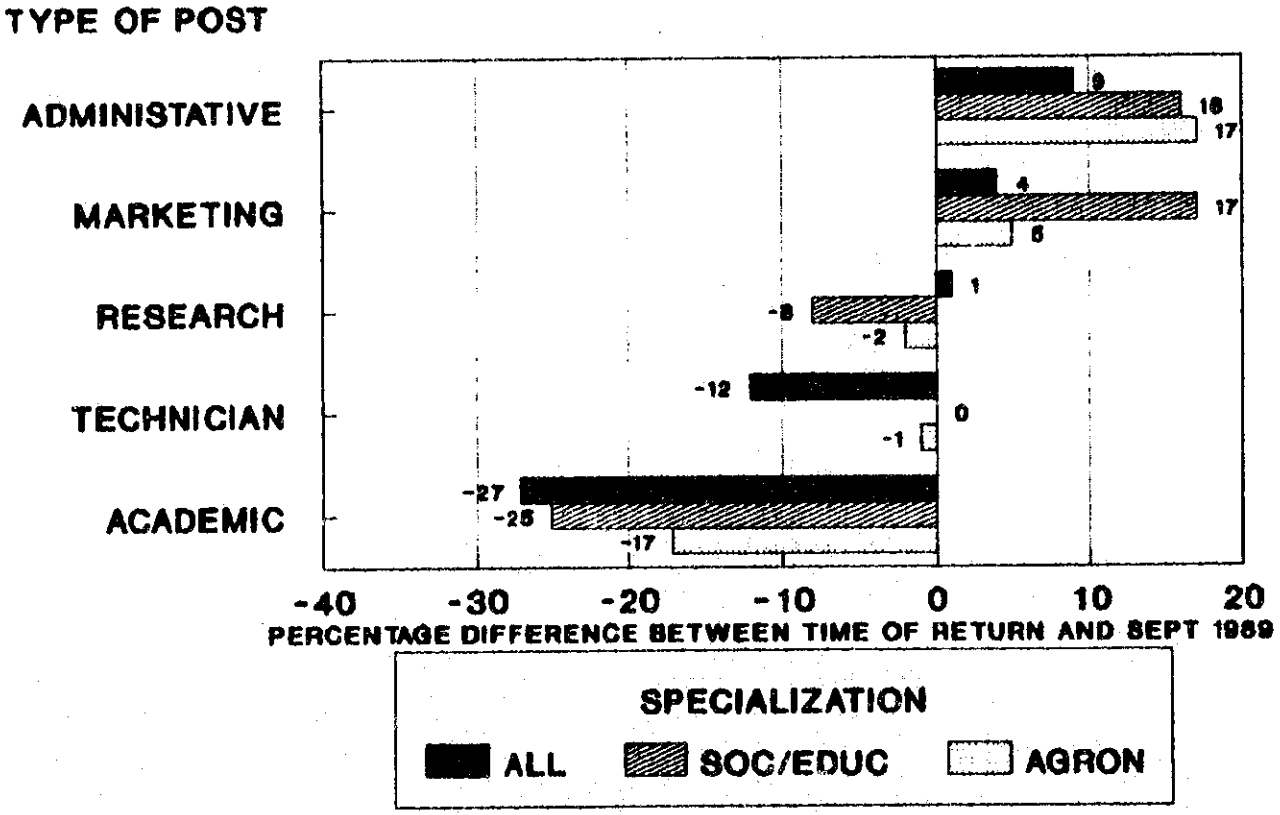


Participants Questionnaire
Questions 11 and 12

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

EXHIBIT 9
EMPLOYMENT CHANGES OF PARTICIPANTS

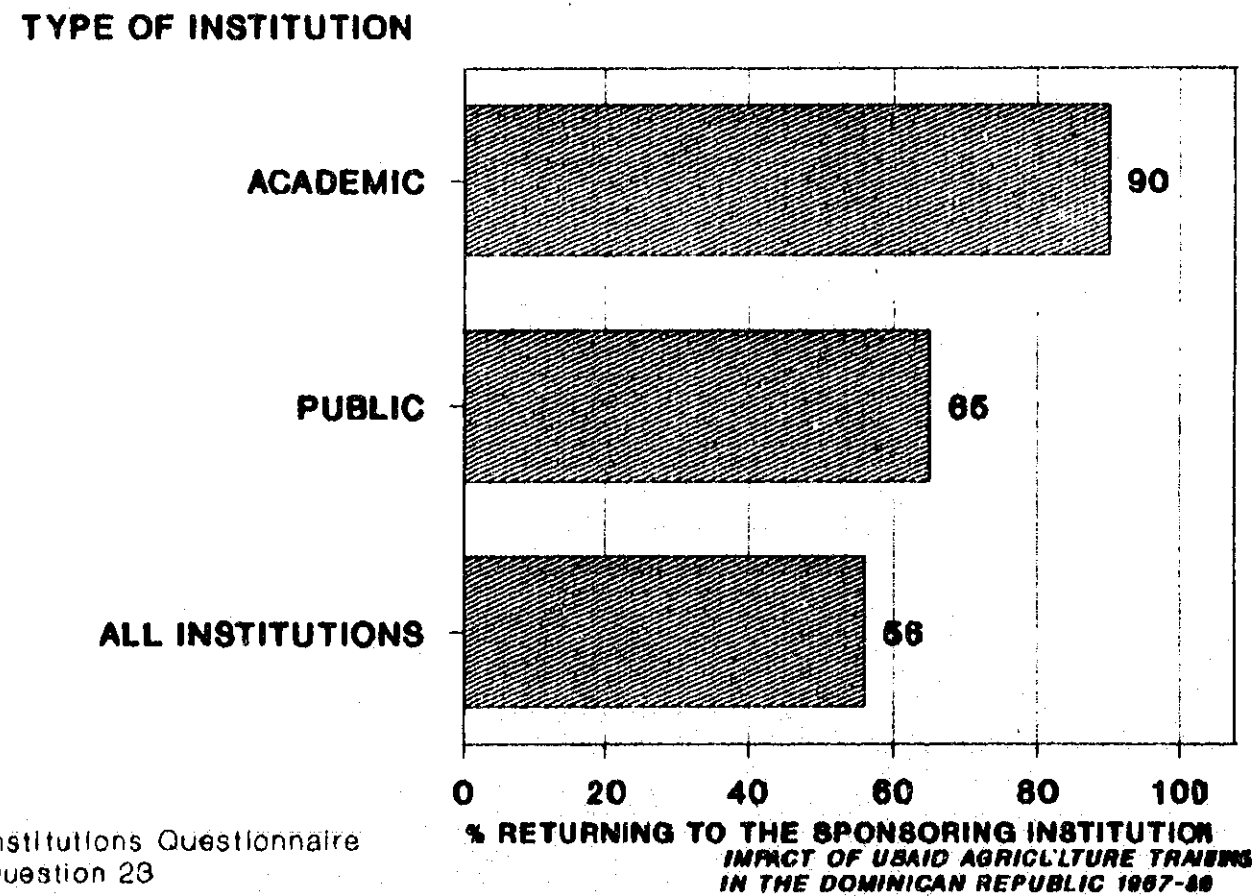
(CHANGES IN POSTS)



Participants Questionnaire
Questions 11, 22 and 39

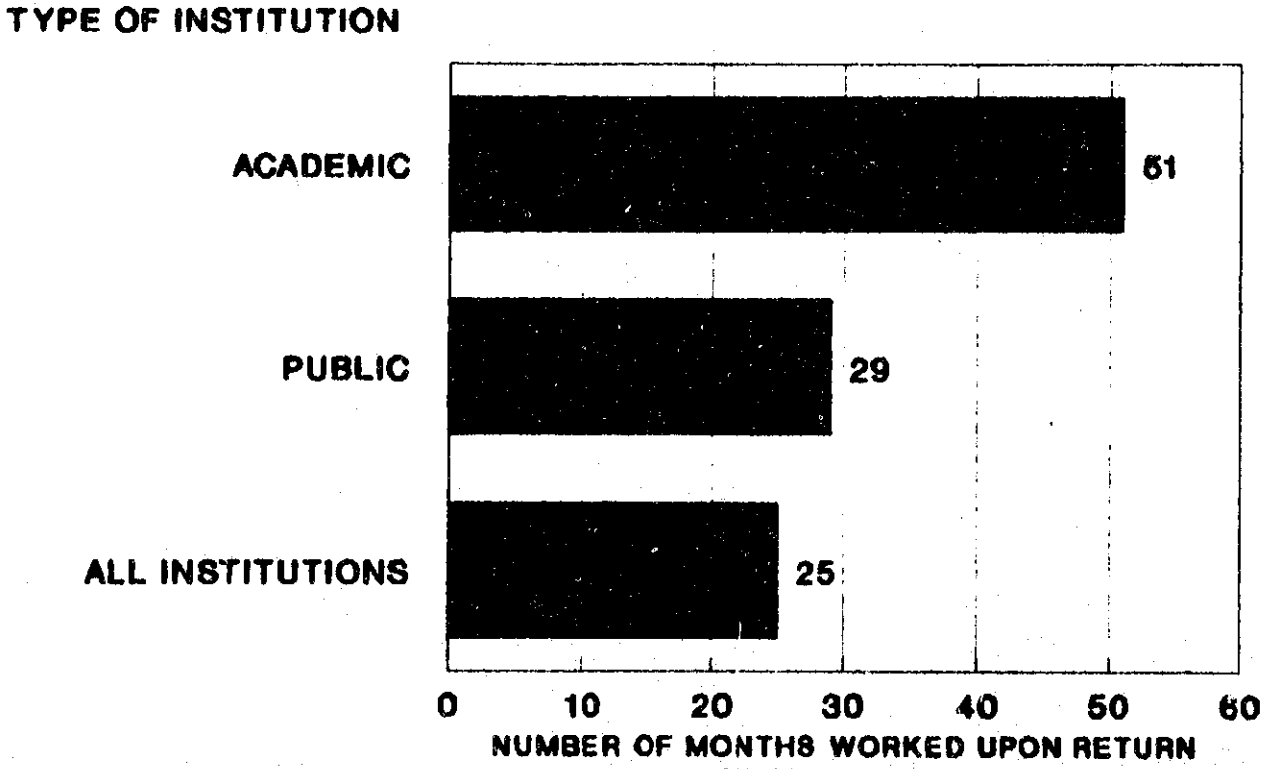
IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

EXHIBIT 10
RETENTION OF GRADUATES BY INSTITUTIONS
(PERCENTAGE THAT RETURNS TO THE SPONSORING INST)



Institutions Questionnaire
Question 28

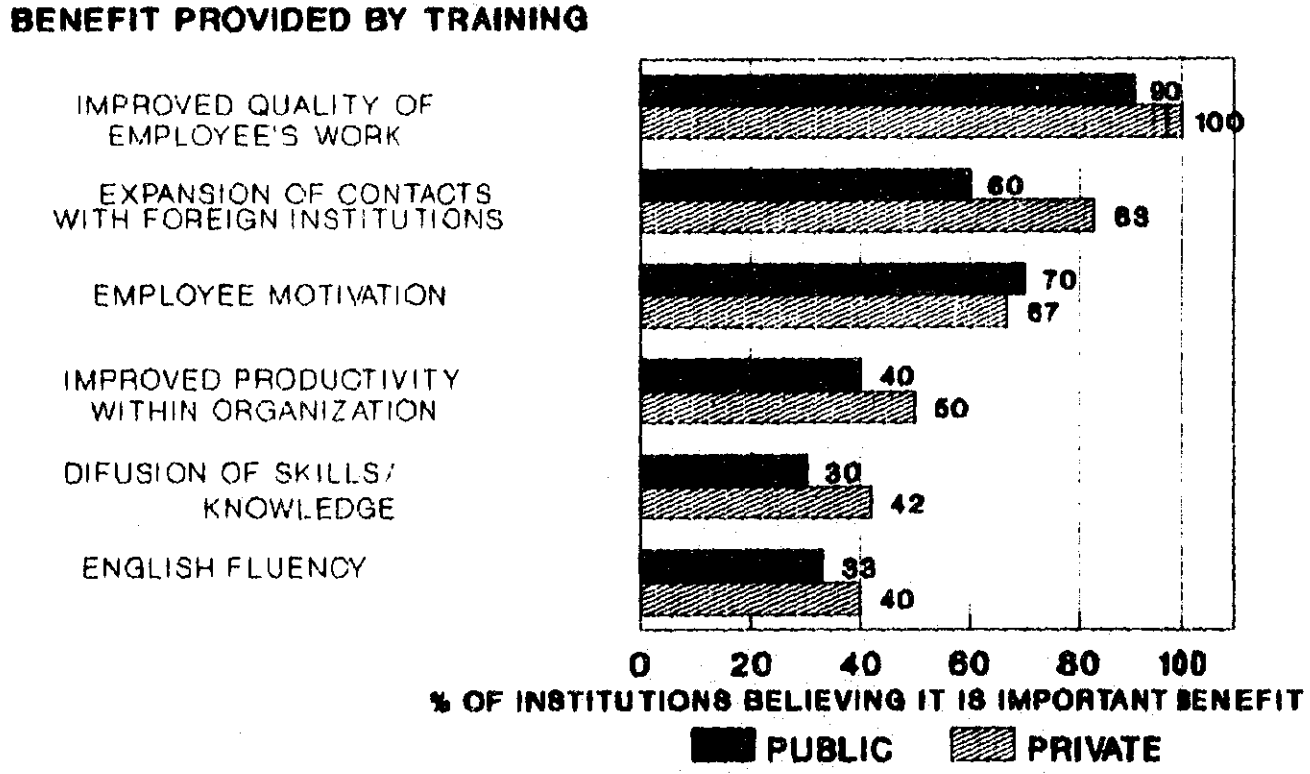
EXHIBIT 11
AVERAGE LENGTH OF STAY IN A SPONSORING INSTITUTION



Institutions Questionnaire
Question 24

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

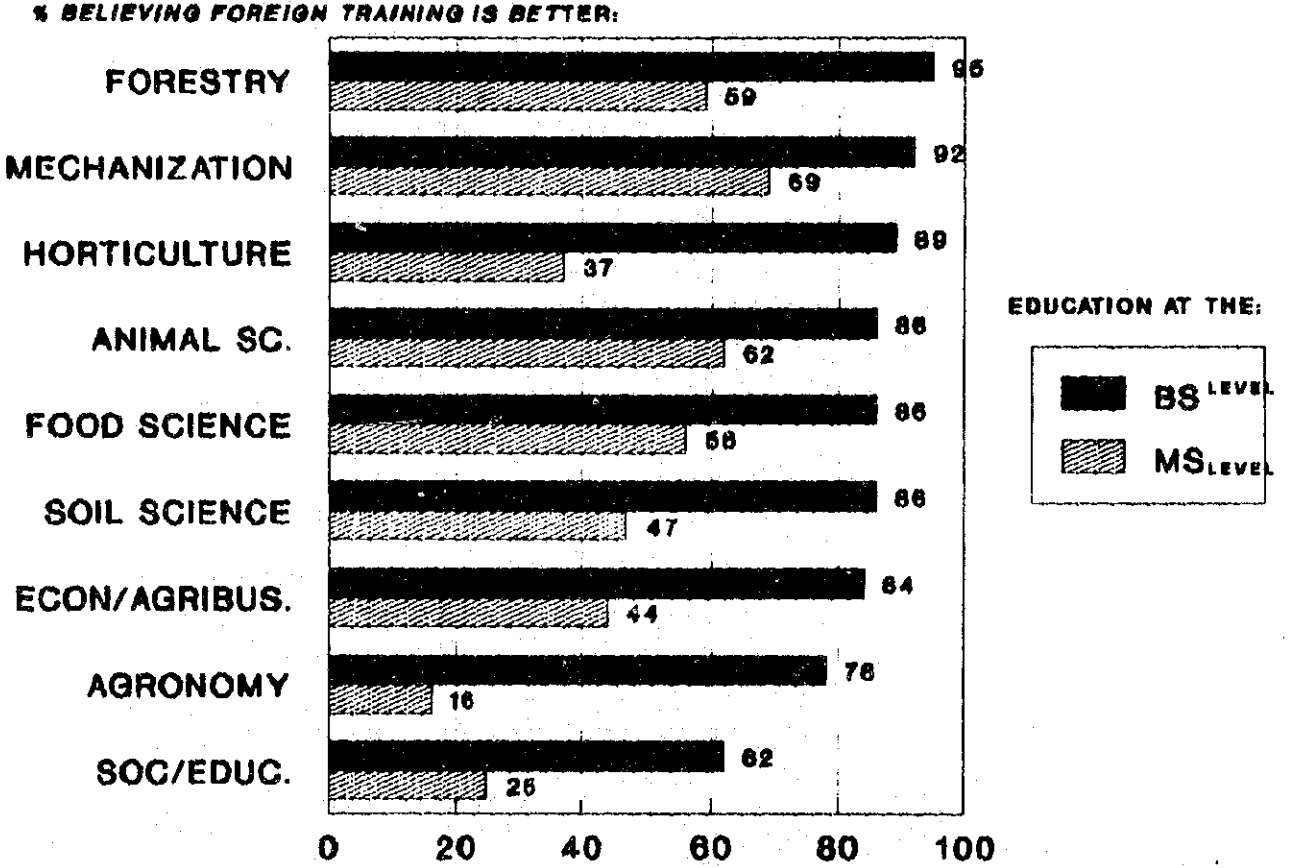
EXHIBIT 12
PROGRAM BENEFITS FOR INSTITUTIONS



Institutions Questionnaire
Question 28

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

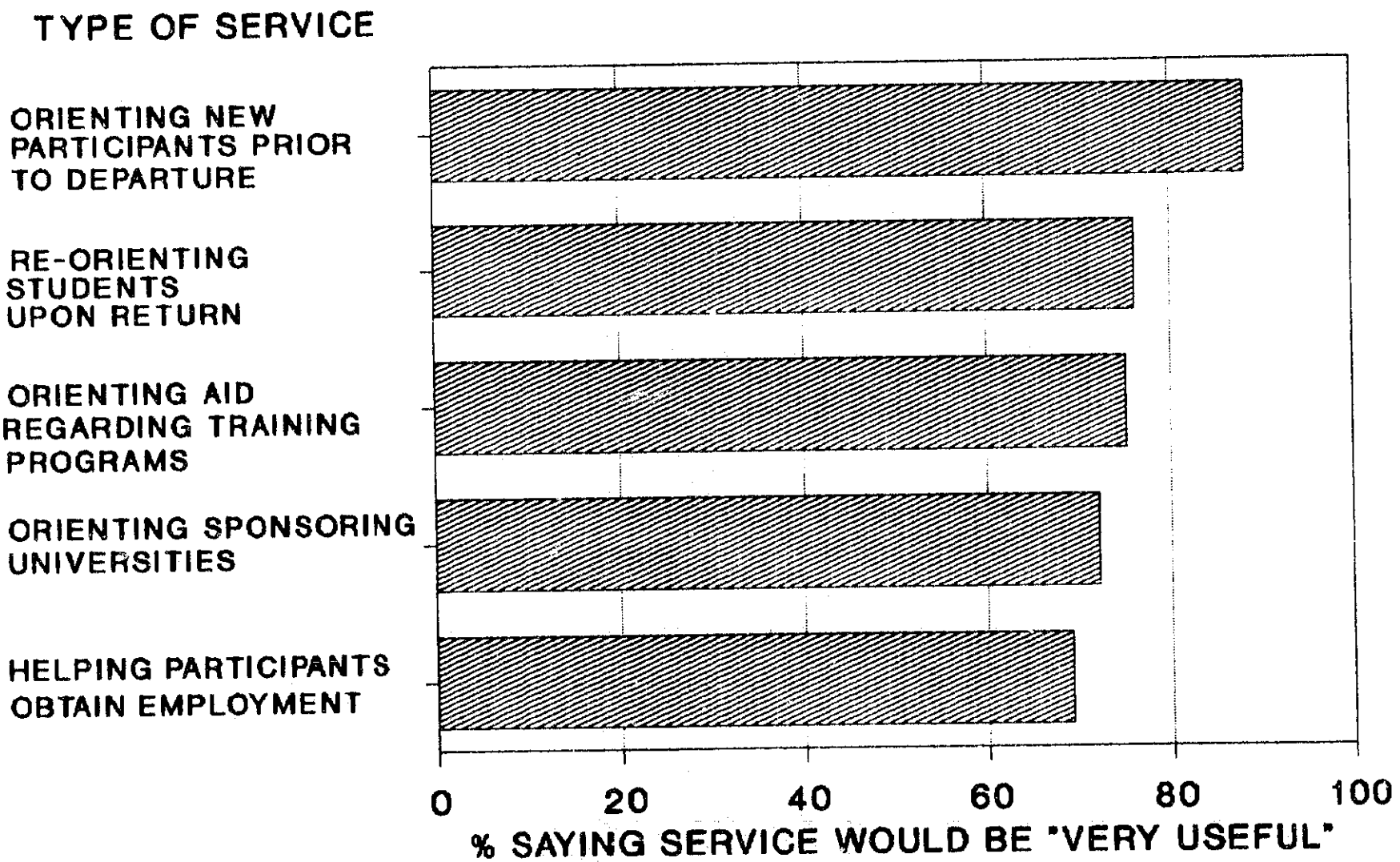
EXHIBIT 13
QUALITY OF FOREIGN VS LOCAL EDUCATION



INSTITUTIONS QUESTIONNAIRE
Questions 14 and 15

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

EXHIBIT 14
ALUMNI ASSOCIATION: POTENTIAL SERVICES



Participants Questionnaire
Question 59

IMPACT OF USAID AGRICULTURE TRAINING IN THE DOMINICAN REPUBLIC 1967-89

APPENDIX A

QUESTIONNAIRE AND FREQUENCY DISTRIBUTIONS

SURVEY OF RETURNED PARTICIPANTS

CUESTIONARIO PARA PARTICIPANTES EGRESADOS DE PROGRAMAS DE ADIESTRAMIENTO A LARGO PLAZO EN EL AREA DE AGRICULTURA

El proposito de esta encuesta es recaudar datos sobre personas que han recibido becas de la Agencia Internacional para el Desarrollo de los Estados Unidos (USAID) para programas de licenciatura, maestria o doctorado fuera de la Republica Dominicana. Este estudio esta financiado por la USAID con el proposito de evaluar los programs de adiestramiento a largo plazo en el campo agropecuario y desarrollo rural y actualizar los expedientes de los egresados. La informacion recaudada por medio de este cuestionario sera tratada de una manera confidencial. Sin embargo, usted tiene la opcion de no contestar las preguntas que juzgue inapropriadas.

Cuestionario No.:_____

Nombre del Encuestador:_____

Aprobado por:_____

Fecha en que fue realizada la entrevista:_____
(dia/mes/ano)

(ANSWERS EXPRESSED AS PERCENTAGES OF TOTAL RESPONSES, N=250)

SOLO PARA CODIFICAR

1. Sexo del encuestado:

   1. Masculino (88) 2. Femenino (12) _____

2. Cuales grados academicos ha obtenido:

	Si	No	
1. Licenciatura (A.A, B.S. o B.A., o equivalente)	1 (35)	2 (65)	_____
2. Maestria	1 (95)	2 (5)	_____
3. Doctorado	1 (76)	2 (24)	_____

3. Indique cual(es) grado(s) academico(s) obtuvo con beca de la AID:

	Si	No	
1. Licenciatura	1 (27)	2 (73)	_____
2. Maestria	1 (72)	2 (28)	_____
3. Doctorado	1 (56)	2 (44)	_____

4. En que ano termino su estudio ACADEMICO[10] con beca de la AID? _____ _____
   (mode: 88, mediar: 80)

5. Nombre de la(s) institucion(es) en Republica Dominicana donde obtuvo grados academicos:

   1. UCMM (24)
   2. ISA (13)
   3. UASD (25)
   4. UNPHU (2)
   5. UCE
   6. INTEC (4)
   7. Instit. Dom. de Tecnologia (0)
   8. Universidad O & M (0)
   9. Otra (24)
      [especifique]:_____

_____ _____

[10]Se refiere solamente a estudios que llevaron a grado academico y no a cursos cortos o seminarios. Si realizo mas de un programa academico con beca de la AID, refierase al ULTIMO programa de estudio.

SOLO PARA CODIFICAR

6. Nombre de la(s) institucion(es) fuera del pais donde estudio con beca de la AID:

1. Texas	6. Michigan	_____
2. Univ.de PR	7. Mexico	
3. Colorado	8. Otro USA	
4. Wisconsin	9. Otro Latinoamerica	
5. Ohio		

7. Indique en cual(es) pais(es) realizo estudios academicos con beca de la AID:

	SI	NO	
1. Estados Unidos	1 (80)	2 (20)	_____
2. Puerto Rico	1 (6)	2 (94)	_____
3. Otro	1 (16)	2 (84)	_____
[especifique]:_____			
4. Otro	1	2	_____
[especifique]:_____			

8. Ha participando en seminarios administrados/ auspiciados por la AID y realizados en el exterior?

1. Si (41) 2. No (59) _____

[si contesto Si, pase a la no. 8a] [si contesto No, pase a la pregunta no. 9]

8a. En cuantos? _____ _____

SOLO
PARA
CODIFICAR

9. Conoce el programa o proyecto bajo el cual fue auspiciado el adiestramiento:

   1. Si [especifique]: (54)_____ _____
   2. No (46)

10. Quien(es) lo selecciono(aron) para la beca?

   1. Director de la institucion donde trabajaba (20) _____
   2. Superior immediato de la institucion donde trabajaba (12)
   3. AID junto con la institucion donde trabajaba (50)
   4. AID solamente (7)
   5. Otro (10)
      [especifique]:_____

SOLO
PARA
CODIFICAR

11. Cual de los siguientes **MEJOR** describe el area de especializacion durante su estudio como becado? (before) (after)

1. Economia Agricola/Agronegocios (16) (19) _____
2. Silvicultura/Foresta/Recursos Naturales (6) (4)
3. Ciencia de Alimentos/Ingenieria Quimica (5) (4)
4. Sociologia/Educacion (5) (3)
5. Produccion Animal/Acuacultura (7) (7)
6. Agronomia/Ingienieria Agronomica/Riego (17) (15)
7. Suelos (5) (4)
8. Ciencias de Cultivos/Horticultura/Botanica (9)
9. Mecanizacion (20) (8)
10. Otra area en agricultura: (2) (8)
    [especifique]:_____
11. Otra area NO en agricultura (10) (16)
    [especifique]:_____

12. Cual de las anteriores **MEJOR** describe su **ACTUAL** area de especializacion? [**lea nuevamente las opciones de la pregunta no.11 y ponga el numero que corresponde al area**]:_____ _____
    Si contesto 10 u 11, especifique:_____

(frequency distributions given above)
[Si la respuesta a la pregunta 11 es diferente a la respuesta dada a la pregunta 12, pase a la pregunta no. 13, si el la misma respuesta, pase a la pregunta no. 14]

13. Si ahora NO trabaja en la misma area de su especializacion academica, indique cual de las siguientes **MEJOR** describe el porque:

1. Porque nunca pude conseguir un trabajo en mi area de especializacion. (13) _____
2. Porque nunca pude conseguir un trabajo <u>interesante</u> en mi area de especializacion. (11)
3. Porque los trabajos en mi area de especializacion pagan muy poco. (40)
4. Porque el area dejo de interesarme profesionalmente. (0)
5. Otra [especifique]: (36)_____

SOLO
PARA
CODIFICAR

14. Indique cuan positivos fueron los siguientes aspectos de los estudios que realizo con beca de la AID?:

1. Muy Positivo 2. Positivo 3. Ni positvo ni negativo 4. Negativo

5. No se/No se aplica

1.	El contenido academico de los cursos	1 (65) 2 (34) 3 (1) 4 (0) 5(0)
2.	La calidad de la ensenaza	1 (70) 2 (27) 3 (2) 4 (1) 5
3.	Los contactos profesionales que forje	1 (51) 2 (35) 3 (11)4 (3) 5 (0)
4.	La experiencia cultural de vivir en el extranjero	1 (89) 2 (19) 3 (1) 4 (1) 5 (0)
5.	La oportunidad de mejorar mi ingles	1 (74) 2 (12) 3 (6) 4 (2) 5 (6)
6.	Las tecnicas que aprendi	1 (61) 2 (35) 3 (3) 4 (0) 5 (0)

SOLO PARA CODIFICAR

15. Indique en que tipo de institucion trabajaba Ud. principalmente ANTES de ir a estudiar con la beca?

1. Empleado en institucion nacional publica[11] (46)
2. Empleado en agencia internacional[12] (1)
3. Empleado en institucion academica[13] (24)
4. Empleado en sector privado sin fines de lucro[14] (1)
5. Empleado en sector empresarial nacional [no empresa propia] (6)
6. Empleado en sector empresarial internacional[15] (0.4)
7. Empresa propia (0.8)

8. No estaba empleado/ estudiante (21)

[si contesto 1-7, pase a la pregunta no. 16]

[pase a la pregunta no. 24]

16. Cual de los siguientes MEJOR describe su cargo en esos momentos?

1. Mayormente cargos administrativos (13)
2. Mayormente cargos tecnicos (48)
3. Mayormente cargos de ensenanza/extension (27)
4. Mayormente cargos de investigacion (11)
5. Mayormente cargos de mercadeo (1)

[11]Por ejemplo, SEA, IAD, CEA, BAGRICOLA, INDRHI, ONAPLAN.

[12]Por ejemplo, el Banco Mundial, BID.

[13]Por ejemplo, UASD, PUCMM, INTEC.

[14]Por ejemplo, institucion religiosa.

[15]Por ejemplo, Dole Dominicana, City Bank u otra multinacional.

SOLO
PARA
CODIFICAR

17. Indique cual de las siguientes **MEJOR** describe las actividades **PRINCIPALES** de esta institucion:[marque todas las que aplique]

	SI	NO	
1. Produccion	1 (29)	2 (71)	_____
2. Procesamiento/Manufactura	1 (12)	2 (88)	_____
3. Servicios (consultoria/ extension/finanzas)	1 (44)	2 (54)	_____
4. Comercio (exportacion/ importacion)	1 (11)	2 (89)	_____
5. Educacion	1 (58)	2 (42)	_____
6. Sector Publico	1 (43)	2 (57)	_____

18. En que region del pais estaba ubicada esta institucion?

1. Distrito Nacional (56) _____
2. Cibao (32)
3. Sur (11)
4. Este (0.5)
5. Otra region nacional (0.5)
6. En el extranjero (EEUU) (0)
7. En el extranjero (otro) (0)

SOLO
PARA
CODIFICAR

19. Cual era su salario mensual al momento de ir al extranjero a estudiar con la beca?

RD$ 570 por mes _____

20. Cuando termino sus estudios, se REINTEGRO a trabajar en la misma institucion?

1. Si (81) 2. No (19) 3. No se aplica _____

[Si contesto Si, pase a la pregunta no. 21]

[si contesto No, o No se aplica, pase a la pregunta no. 26]

21. Con que salario mensual se reintegro a la institucion? RD$ 711 por mes _____

22. Cual de los siguientes MEJOR describe su cargo al volver a la institucion?

1. Mayormente cargos administrativos (14) _____
2. Mayormente cargos tecnicos (42)
3. Mayormente cargos de ensenanza/extension (33)
4. Mayormente cargos de investigacion (11)
5. Mayormente cargos de mercadeo (0)

23. Recibio un ascenso cuando se reintegro?

1. Si (59) 2. No (41) _____

SOLO PARA CODIFICAR

24. Al regresar, pudo hacer buen uso de los concimientos adquiridos durante sus estudios?

1. Si, con frecuencia (70) 2. Si, de vez en cuando (23) 3. Nunca (7) _____

[si marco 1 o 2, pase a la pregunta no. 26] [si marco 3, pase a la pregunta no. 25]

25. En su opinion, por que no uso esos conocimientos?

1. Escasez o diferencia de tecnologia (13) _____
2. Cargo no tenia relacion con lo que estudie (13)
3. Me faltaba el personal de apoyo (0)
4. Escasez de recursos financieros (20) en la institucion
5. Politicas de la institucion (13)
6. Otro [especifique]: (20) _____

26. Esta Ud. ACTUALMENTE trabajando con la misma institucion donde comenzo al terminar sus estudios becados?

1. Si (38) 2. No,cambie (59) 3. Sigo desempleado (3) _____

[si contesto 1, pregunta no. 29] [si contesto 2, pregunta no. 27] [si contesto 3, pregunta no.47]

27. Cuanto tiempo permanecio en la institucion donde primero trabajo al terminar sus estudios?

1. Menos de un ano (26) _____
2. Entre uno y dos anos (22)
3. Mas de dos anos, pero menos de 5 anos (21)
4. Mas de 5 anos (31)

SOLO
PARA
CODIFICAR

28. Cual de las siguientes **MEJOR** describe el motivo por el cual dejo esa institucion?

1. Para obtener mejor sueldo (23) _____
2. Para tener mas oportunidad de utilizar mis conocimientos. (11)
3. Para realizar un trabajo mas interesante. (2)
4. Para obtener mejores oprtunidades de avanzar profesionalmente. (30)
5. Otras razones profesionales. (11)
6. Para iniciar un negocio propio. (5)
7. Razones personales (5)
7. Otro [especifique]: (12) _____

29. En que ano comenzo a trabajar DESPUES de terminar sus estudios en el exterior? _____ _____

30. Indique en que tipo de institucion comenzo a trabajar DESPUES de regresar de sus estudios:

1. Empleado en institucion publica (55) _____
2. Empleado en institucion academica (35)
3. Empleado en sector privado sin fines de lucro (1)
4. Empleado en sector empresarial nacional (5)
5. Empleado en sector empresarial internacional (3)
6. Empleado en agencia internacional (3)
7. Empresa propia (1)

SOLO PARA CODIFICAR

31. Indique cual de las siguientes **MEJOR** describe las actividades **PRINCIPALES** de esta institucion:[marque todas las que aplique]

	SI	NO	
1. Produccion	1 (31)	2 (69)	_____
2. Procesamiento/Manufactura	1 (13)	2 (87)	_____
3. Servicios (consultoria/ extension/finanzas)	1 (40)	2 (60)	_____
4. Comercio (exportacion/ importacion)	1 (10)	2 (90)	_____
5. Educacion	1 (60)	2 (40)	_____
6. Administracion publica	1 (41)	2 (59)	_____

32. Trabajo Ud. en un area relacionada directamente con el sector agropecuario o desarrollo rural?

1. Si (89) 4. No (19) _____

33. Cual fue su salario mensual en esta institucion?
RD$ 1,062 al mes _____

34. Cual de los siguientes MEJOR describe su cargo en la institucion?

1. Mayormente cargos administrativos (18) _____
2. Mayormente cargos tecnicos (46)
3. Mayormente cargos de ensenanza/extension (30)
4. Mayormente cargos de investigacion (6)
5. Mayormente cargos de mercadeo (0)

SOLO
PARA
CODIFICAR

35. Donde estaba ubicada esta institucion?

1. Distrito Nacional (52)
2. Cibao (34)
3. Sur (8)
4. Este (2)
5. Otra region nacional (2)
6. En el extranjero (EEUU) (0)
7. En el extranjero (otro) (0)

_____

36. En total, para cuantas instituciones diferentes ha trabajado Ud. desde que termino sus estudios bajo la beca?

2.5

_____

SOLO
PARA
CODIFICAR

37. ACTUALMENTE, en que tipo de institucion trabaja Ud. principalmente?

1. Empleado en institucion publica no academica (30)
2. Empleado en institucion academica (19)
3. Empleado en sector privado sin fines de lucro (4)
4. Empleado en sector empresarial nacional (22)
5. Empleado en sector empresarial internacional (9)
6. Empleado en agencia internacional (5)
7. Empresa propia (8)
8. No estoy empleado (0)
[si contesto 8, pase a la pregunta no. 47]

[si contesto del 1-7, pase a la pregunta no. 38]

SOLO PARA CODIFICAR

38. Indique cual de las siguientes **MEJOR** describe las actividades **PRINCIPALES** de esta institucion: [marque todas las que aplique]

	SI	NO	
1. Produccion	1 (35)	2 (65)	_____
2. Procesamiento/Manufactura	1 (20)	2 (80)	_____
3. Servicios (consultoria/ extension/finanzas)	1 (51)	2 (49)	_____
4. Comercio (exportacion/ importacion)	1 (24)	2 (76)	_____
5. Educacion	1 (42)	2 (58)	_____
6. Administracion publica	1 (26)	2 (74)	_____

39. Cual de los siguientes MEJOR describe su cargo en la institucion?

1. Mayormente cargos administrativos (37) _____
2. Mayormente cargos tecnicos (38)
3. Mayormente cargos de ensenanza/extension (13)
4. Mayormente cargos de investigacion (7)
5. Mayormente cargos de mercadeo (4)

40. Cual es su salario mensual AHORA en esta institucion? RD$ 3,156 al mes _____

SOLO
PARA
CODIFICAR

41. Trabaja Ud. ACTUALMENTE en un area relacionada directamente con el sector agropecuario o desarrollo rural?

1. Si (82) 4. No (18) _____

42. Donde esta ubicada esta institucion?

1. Distrito Nacional (58) _____
2. Cibao (27)
3. Sur (7)
4. Este (4)
5. Otra region nacional (2)
6. En el extranjero (EEUU) (2)
7. En el extranjero (otro) (0)

43. En su cargo principal ACTUAL, piensa Ud. que esta usando los conocimientos adquiridos durante sus estudios en el exterior?

1. Si, con frecuencia (67) 2. Si, de vez en cuando (28) 3. Nunca (5) _____

[si marco 1 o 2, pase a la pregunta no. 45] [si marco 3, pase a la pregunta no. 44]

44. En su opinion, por que no uso esos conocimientos?

1. Escasez o diferencia de tecnologia (8) _____
2. Cargo no tenia relacion con lo que estudie (42)
3. Me faltaba el personal de apoyo (0)
4. Escasez de recursos financieros en la institucion (0)
4. Politicas de la institucion (42)
6. Otro [especifique]:_____(17)_____

45. Tiene Ud. planes de cambiar de institucion en los proximos 12 meses?

1. Si (27) 2. No (73) _____

[si contesto Si, pase a la pregunta no. 46] [pase a la pregunta no. 51]

SOLO
PARA
CODIFICAR

46. Cual de las siguientes **MEJOR** describe el motivo por el cual quisiera cambiar de empleo?

1. Para obtener mejor sueldo (39) _____
2. Para tener mas oportunidad de utilizar mis conocimientos. (4)
3. Para realizar un trabajo mas interesante. (2)
4. Para obtener mejores oprtunidades de avanzar profesionalmente. (33)
5. Otras razones profesionales. (6)
6. Razones personales (3)
7. Otro [especifique]: (12) _____

[Pase a la pregunta no. 48]

47. Cual de las siguientes MEJOR describe la razon por la cual no esta trabajando ahora?

1. Porque no encuentro trabajo que pague lo que yo quiero. (33) _____
2. Porque no encuento un trabajo en el area/la especializacion que quiero. (0)
3. Porque no encuentro trabajo en la region geografica que deseo. (0)
4. Por razones personales. (0)
5. Porque pienso seguir estudiando. (1)
6. Otro [especifique]: (56) _____

SOLO
PARA
CODIFICAR

48. En que tipo de institucion desearia trabajar?

1. Empleado en institucion publica no academica (5) _____
2. Empleado en institucion academica (5)
3. Empleado en sector privado sin fines de lucro (5)
4. Empleado en sector empresarial nacional (20)
5. Empleado en sector empresarial internacional (18)
6. Empleado en sector publico internacional (26)
7. Empresa propia (19)

49. Piensa que seguira en un area relacionada directamente con el sector agropecuario o desarrollo rural?

1. Si (81) 2. No (19) _____

50. En cual area/region geografica preferiria trabajar?

1. Distrito Nacional (28) _____
2. Cibao (21)
3. Sur (3)
4. Este (3)
5. Otra region nacional (4)
6. En el extranjero (EEUU) (11)
7. En el extranjero (otro) (3)
8. Me daria igual (28)

SOLO
PARA
CODIFICAR

56. Cual de los siguientes, MEJOR describe el tipo de contacto desearia tener con la AID? [**Marque uno**]

1. Recibir informacion sobre becas disponibles (9) _____
2. Organizacion de reuniones con otros becados (8)
3. Recibir informaciones sobre oportunidades de empleo profesionales (34)
4. Recibir informaciones tecnicas. (45)
5. Otro [especifique]:_____(4)_____

57. Mantiene contactos con otros participantes?

1. Si (91) 2. No (9) _____

58. Estaria Ud. interesado en pertenecer a una asociacion de ex-becados de la AID?

1. Si (95) 2. No (5) _____

SOLO
PARA
CODIFICAR

59. Para cada uno de los siguientes servicios que podria ofrecer esta organizacion de ex-becados, indique su utilidad.

1. Muy util 2. Menos util 3. Nada util 4. No se

1. Orientacion para ayudar a los futuros becados a integrarse en el exterior	1 (88)	2 (9)	3 (2)	4 (1)	_____
2. Orientacion para ayudar a los becados a reintegrarse en RD	1 (76)	2 (20)	3 (3)	4 (1)	_____
3. Orientacion a la AID sobre la utilidad de diferentes tipos de programs de estudios	1 (74)	2 (23)	3 (4)	4 (1)	_____
4. Orientacion a las universidades patrocinadoras sobre como mejor apoyar a los becados	1 (73)	2 (22)	3 (4)	4 (1)	_____
5. Ayudar a los ex-becarios a conseguir empleos	1 (69)	2 (20)	3 (8)	4 (3)	_____

SOLO
PARA
CODIFICAR

60. Conoce Ud. de alguna persona que haya realizado estudios fuera del pais con beca de la AID y NO regreso al pais al terminar sus estudios?

1. Si (36) [si contesto Si, pase a la pregunta no. 61]
2. No (59) [si contesto No o ne se, pase a la pregunta no. 62]
3. No se (5)

_____

61. Conoce si esa persona:

1. Sigue viviendo en el exterior? (78)
2. Volvio al pais? (6)
3. No sabe. (17)

_____

[Las respuestas que ha proporcionado anteriormente se mantendran totalmente confidenciales. En esta pagina, por separado, quisieramos pedirle una serie de datos personales para poder actualizar los archivos de la AID. Esta informacion no se analizara en coneccion con la informacion recaudada anteriormente. Le agradecemos su cooperacion.]

62. Apellido y nombre del encuestado:

    [apellidos]_____
    [nombre]_____

63. Direccion de su oficina principal:
    [Institucion]_____
    [Departamento]_____
    [Calle y no.]_____
    [Ciudad]_____
    [Pais]_____

64. Numero de telefono de la oficina:_____

65. Direccion de su domicilio actual:

    [calle y no.]_____
    [Sector]_____
    [ciudad]_____
    [provincia]_____
    [pais]_____

66. Telefono de su domicilio actual:_____

CUESTIONARIO PARA PERSONAS NO LOCALIZABLES PARA ENTREVISTAS

Encuestador no.:_____

Fecha:_____
(dia/mes/ano)

Apellidos del encuestado:_____
Nombre del encuestado:_____

Donde se encuentra el encuestado en estos momentos?
ciudad:_____
pais:_____

Si esta fuera del pais, cuando regresara?_____

A que institucion pertenece actualmente?

[Institucion]_____
[Departamento]_____
[Calle y no.]_____
[Ciudad]_____

Numero de telefono de la oficina:_____

Direccion de su domicilio actual:

[calle y no.]_____
[Sector]_____
[ciudad]_____

Telefono de su domicilio actual:_____

APPENDIX B

QUESTIONNAIRE AND FREQUENCY DISTRIBUTIONS

SURVEY OF INSTITUTIONS

CUESTIONARIO PARA AGENCIAS QUE EMPLEAN O HAN EMPLEADO EGRESADOS DE PROGRAMAS DE ADIESTRAMIENTO A LARGO PLAZO EN EL AREA DE AGRICULTURA

El proposito de esta encuesta es recaudar datos sobre personas que han recibido becas de la Agencia Internacional para el Desarrollo de los Estados Unidos (USAID) para programas de licenciatura, maestria o doctorado fuera de la Republica Dominicana. Este estudio esta financiado por la USAID con el proposito de evaluar los programs de adiestramiento a largo plazo en el campo agropecuario y desarrollo rural y actualizar los expedientes de los egresados. La informacion recaudada por medio de este cuestionario sera tratada de una manera confidencial. Sin embargo, usted tiene la opcion de no contestar las preguntas que juzgue inapropriadas.

Cuestionario No.:_____

Nombre del Encuestador:_____

Aprobado por:_____

Fecha en que fue realizada la entrevista:_____
(dia/mes/ano)

(EXPRESSED AS PERCENTAGES OF TOTAL RESPONSES, N=37)

SOLO PARA CODIFICAR

1. Posicion del encuestado

   1. Gerente de personal/ encargado de adiestrammiento (35) _____
   2. Gerente/administracion (14)
   3. Director general (24)
   4. Dueno (3)
   5. Otro (24)

2. Indique que tipo de institucion es esta.

   1. Institucion publica no academica[16] (30) _____
   2. Institucion academica[17] (13)
   3. Sector privado sin fines de lucro[18] (11)
   4. Sector empresarial nacional (32)
   5. Sector empresarial internacional[19] (8)
   6. Sector publico internacional[20] (5)

[16]Por ejemplo, SEA, IAD, CEA, BAGRICOLA, INDRHI, ONAPLAN.

[17]Por ejemplo, UASD, PUCMM.

[18]Por ejemplo, instituciones como ADEMI, PROAPE.

[19]Por ejemplo, Dole Dominicana, City Bank u otra multinacional.

[20]Por ejemplo, el Banco Mundial, BID.

SOLO PARA CODIFICAR

3. Indique cual de las siguientes **MEJOR** describe las actividades **PRINCIPALES** de esta institucion:[marque todas las que aplique]

	SI	NO	
1. Produccion agricola	1 (59)	2 (41)	_____
2. Procesamiento/Manufactura	1 (40)	2 (60)	_____
3. Servicios (consultoria/ extension/finanzas)	1 (49)	2 (51)	_____
4. Comercio (exportacion/ importacion)	1 (30)	2 (70)	_____
5. Educacion	1 (30)	2 (70)	_____
6. Sector Publico	1 (30)	2 (30)	_____

4. Ha patrocinado la institucion personas para ir a estudiar fuera durante mas de 12 meses con becas de la AID?

1. Si (60) [si contesto Si, pase a la pregunta no. 5]

2. No (40) [si contesto No, o no se, pase a la pregunta no. 11]

3. No se

_____

SOLO
PARA
CODIFICAR

5. Conoce el(los) programa(s) o proyecto(s) bajo el (los) cual(es) fue(ron) auspiciado el adiestramiento a largo plazo:

   1. Si[especifique]: (42) _____

   _____

   2. No (58)

6. Quien(es) selecciono(aron) los participantes para la beca?

   1. Director de la institucion (5)
   2. Superior immediato del participante en la institucion (5)
   3. AID junto con la institucion (19)
   4. AID solamente (0)
   5. AID, la institucion ejecutora del proyecto y la institucion (16)
   6. Procedimientos cambiantes/depende del proyecto (16)
   7. Otro (8)
      [especifique]:_____

_____

7. Por lo general el egresado de un programa de adiestramiento a largo plazo recibe un aumento de sueldo al regresar a la institucion?

   1. Si (71)
   2. Depende del nivel o grado academico que recibio (19)
   3. No se (5)
   4. No (5)

_____

[Si contesto 1, 2, o 3, pase a la pregunta no.9]

[si contesto no, pase a la pregunta no.8]

SOLO
PARA
CODIFICAR

8. Por que NO se otorga ningun cambio de sueldo
   al egresado al regresar de sus estudios?

   1. Politica de la institucion (100) _____
   2. Porque se quiere ver la
      utilidad del entrenamiento antes
      de otorgar un incentivo
   3. Escasez de recursos finacieros
   4. Escasez de recursos administrativos
   5. Para no crear celos entre los empleados
   6. Otra [especifique]:_____
   7. No se
   8. No se aplica

9. Por lo general se le da al egresado
   que regresa un ascenso o cambio
   de cargo al reintegrarse
   en la institucion?

   1. Si (30) _____
   2. Depende del nivel o grado (45)
      academico que recibio
   3. No se (5)

[Si contesto 1, 2 o 3
pase a la pregunta no.11]

4. No (20)
[si contesto no o
no se, pase a la
pregunta no.10]

10. Por que NO se otorga ningun cambio de puesto
    o promocion al egresado al regresar
    de sus estudios?

   1. Politica de la institucion (60) _____
   2. Porque se quiere ver la
      utilidad del entrenamiento antes
      de hacer un cambio de personal (40)
   3. Escasez de recursos finacieros
   4. Escasez de recursos administrativos
   5. Para no crear celos entre los empleados
   6. Otra [especifique]:_____
   7. No se
   8. No se aplica

SOLO
PARA
CODIFICAR

11. Piensa que esta institucion esta interesada en patrocinar (o seguir patrocinando) personas para adiestramiento a largo plazo?

1. Si (78) [si contesto Si, pase a la pregunta no. 13]
2. No (13) [si contesto No o no se, pase a la pregunta no.12]
3. No se (54)

_____

12. Por que NO esta interesado en patrocinar personas para ir a estudiar fuera en programas academicos a largo plazo (BS, MS o PHD)?

1. Porque no necesitamos personal a un nivel de adiestramiento tan sofisticado. (12)
2. Porque podemos conseguir facilmente personas de igual preparacion en el pais. (0)
3. Porque no podemos prescindir de un empleado tanto tiempo. (0)
4. Por escasez de recursos finacieros. (38)
5. Por escasez de recursos administrativos. (0)
6. Porque no tenemos los candidatos indicados (0)
7. Otro [especifique]: (50) _____

_____

13. Por lo general, para cual nivel academico piensa Ud. que es mejor mandar personas a estudiar al exterior?

1. Licenciatura (B.S. o B.A., A.A.) (5)
2. Maestria (59)
3. Ph.D. (doctorado) (5)
4. Todos (0)
5. Ninguno, el entrenamiento en el pais es adecuado (0)
6. Depende del campo de estudio (30)

_____

SOLO
PARA
CODIFICAR

14. Indique para que areas/campos de especializacion considera que el adiestramiento es MEJOR en Republica Dominicana a nivel de LICENCIATURA:

1. Mejor en RD 2. Mejor en el Exterior 3. No hay diferencia 4.No Se

1. Economia agricola/ Agronegocios	1 (49)	2 (43)	3 (8)	4 (0)	_____
2. Silivicultura/Foresta/ Recursos Naturales	1 (30)	2 (59)	3 (0)	4 (11)	_____
3. Ciencia de Alimentos/ Ingenieria Quimica	1 (27)	2 (57)	3 (27)	4 (13)	_____
4. Sociologia/Educacion	1 (68)	2 (24)	3 (8)	4 (0)	_____
5. Produccion Animal/ Acuacultura	1 (30)	2 (62)	3 (3)	4 (5)	_____
6. Agronomia/Ing. Agronomica	1 (81)	2 (13)	3 (3)	4 (3)	_____
7. Riego	1 (40)	2 (49)	3 (0)	4 (8)	_____
8. Ciencias de Cultivo/ Botanica/Horticultura	1 (49)	2 (38)	3 (5)	4 (8)	
9. Mecanizacion	1 (32)	2 (68)	3 (0)	4 (0)	_____

SOLO PARA CODIFICAR

15. Indique para que areas/campos de especializacion considera que el adiestramiento es MEJOR en Republica Dominicana a nivel de MAESTRIA:

1. Mejor en RD 2. Mejor en el Exterior 3. No hay diferencia 4.No Se

1. Economia agricola/ Agronegocios	1 (16)	2 (84)	3 (0)	4 (0)	_____
2. Silivicultura/Foresta/ Recursos Naturales	1 (3)	2 (95)	3 (0)	4 (3)	_____
3. Ciencia de Alimentos/ Ingenieria Quimica	1 (5)	2 (86)	3 (3)	4 (5)	_____
4. Sociologia/Educacion	1 (35)	2 (62)	3 (3)	4 (0)	_____
5. Produccion Animal/ Acuacultura	1 (11)	2 (86)	3 (3)	4 (0)	_____
6. Agronomia/Ing. Agronomica	1 (19)	2 (78)	3 (0)	4 (3)	_____
7. Riego	1 (11)	2 (86)	3 (0)	4 (3)	_____
8. Ciencias de Cultivo/ Botanica/Horticultura	1 (11)	2 (89)	3 (0)	4 (0)	
9. Mecanizacion	1 (5)	2 (92)	3 (0)	4 (3)	_____

SOLO
PARA
CODIFICAR

16. Se emplean en esta institucion ACTUALMENTE personas con:

	SI	NO	
1. Licenciatura	1 (86)	2 (14)	_____
2. Maestria	1 (86)	2 (14)	_____
3. Doctorado	1 (35)	2 (65)	_____

17. La institucion emplea ahora personas que han ido a estudiar fuera por mas de 12 meses con beca de la AID

1. Si (68) 2. No (32) 3. No se (0) _____

18. Cuantos de estos ex-becarios de la AID emplean? 7 _____

19. Que porcentaje de los ex-becarios que emplean esta esta institucion tienen:

1. Licenciatura	49 %	_____
2. Maestria	32 %	_____
3. Doctorado	0.5 %	_____

20. Por lo general, que tipo de cargos desempenan los egresados que emplea esta institucion?:

	SI	NO	
1. Mayormente cargos administrativos	1 (42)	2 (58)	_____
2. Mayormente cargos tecnicos	1 (67)	2 (33)	_____
3. Mayormente cargos de ensenanza/extension	1 (42)	2 (58)	_____
4. Mayormente cargos de investigacion	1 (30)	2 (70)	_____
5. Mayormente cargos de mercadeo	1 (9)	2 (91)	_____

SOLO
PARA
CODIFICAR

21. En general, como se compara la calidad del trabajo de los egresados de programas en el exterior con la calidad de los empleados con preparacion academica similar que no han ido a estudiar afuera?

1. Mejor 2. Igual 3. Peor 4. No se 5. No se aplica

1. En practicas administrativas	1 (60)	2 (20)	3 (0)	4 (0)	5 (20)	_____
2. En conocimientos tecnicos	1 (79)	2 (6)	3 (0)	4 (6)	5 (9)	_____
3. En tecnicas de laboratorio	1 (57)	2 (9)	3 (0)	4 (9)	5 (24)	_____
4. En tecnicas de investigacion	1 (69)	2 (3)	3 (0)	4 (12)	5 (15)	_____
5. En tecnicas educacionales/ de extension	1 (32)	2 (32)	3 (0)	4 (12)	5 (27)	_____
6. En tecnicas de redaccion/ comunicacion	1 (51)	2 (18)	3 (0)	4 (15)	5 (15)	_____
7. En tecnicas/conocimientos de mercadeo	1 (42)	2 (18)	3 (0)	4 (15)	5 (24)	_____

SOLO PARA CODIFICAR

22. Cuan importantes son (han sido) los siguientes factores en la decision de patrocinar personas para ir a estudiar fuera?

1. Muy importante 2. Importante 3. No importante 4. No se/ No se aplica

1. La necesidad de utilizar las becas disponibles	1 (19)	2 (39)	3 (35)	4 (6)	_____
2. Entrenar a personas en especializaciones que escasean en el pais	1 (81)	2 (16)	3 (0)	4 (3)	_____
3. Entrenar a personas mejor de lo que podrian entrenar en el pais	1 (74)	2 (23)	3 (0)	4 (3)	_____
4. Para motivar a los empleados	1 (23)	2 (55)	3 (16)	4 (6)	_____
5. Para mejorar los contactos de la institiucion en el extranjero	1 (32)	2 (29)	3 (29)	4 (10)	_____
6. Porque estamos sujetos a mandar gente fuera como parte de los acuerdos con la AID	1 (6)	2 (16)	3 (32)	4 (45)	_____
7. Para mejorar las operaciones/ productividad de la instituicion	1 (74)	2 (13)	3 (6)	4 (6)	_____

23. En promedio, que porcentaje de los que se mandan a estudiar afuera se reintegran a la institucion a terminar sus estudios? 56 % _____

24. En promedio, cuanto tiempo permanecen en la institucion los egresados despues de su regreso?

25 meses _____

SOLO
PARA
CODIFICAR

25. Considera Ud. que esta institucion hace buen uso de los concimientos adquiridos por los egresados durante sus estudios?

1. Si, con frecuencia (75) [si marco 1 o 2, pase a la pregunta no. 28]
2. Si, de vez en cuando (19)
3. Nunca (6) [si marco 3, pase a la pregunta no. 27]

_____

26. En su opinion, por que la institucion **NO** hace buen uso de los concimientos que adquieren los egresados de programas de adiestramiento a largo plazo?

1. Escasez o diferencia de tecnologia (0)
2. El cargo no tiene relacion con lo que estudio (0)
3. Escasez de personal apropiado de apoyo (0)
4. Escasez de recursos financieros (0) en la institucion (0)
5. Politicas de la institucion (0)
6. Otro [especifique]: (2)

_____

_____

SOLO
PARA
CODIFICAR

27. Por lo general, que tan importantes piensa que son los siguientes motivos para que un egresado deje la institucion?

1. Muy importante 2.Importante 3.No importante 4. No se/ No se aplica

1. Para obtener mejor sueldo	1 (33)	2 (33)	3 (0)	4 (33)	_____
2. Para tener mas oportunidad de utilizar sus conocimientos	1 (17)	2 (33)	3 (17)	4 (33)	_____
3. Para realizar un trabajo mas interesante	1 (0)	2 (29)	3 (43)	4 (29)	_____
4. Para incrementar sus oportunidades de avance profesional	1 (0)	2 (17)	3 (17)	4 (66)	_____
5. Otras razones profesionales	1 (0)	2 (0)	3 (25)	4 (75)	_____
6. Razones personales	1 (0)	2 (0)	3 (17)	4 (83)	_____

SOLO
PARA
CODIFICAR

28. Cuan importante cree que que son los siguientes beneficios del adiestramiento a largo plazo que facilitan las becas de la AID?

1. Muy importante 2. Importante 3. No importante 4. No se/ No se aplica

1. Los contactos que hace la institucion con otras agencias en el exterior	1 (41)	2 (41)	3 (9)	4 (9)	_____
2. Incrementos en la calidad del trabajo de los egresados	1 (83)	2 (14)	3 (0)	4 (3)	_____
3. La motivacion/incentivo a los empleados que ven la posibilidad de becas	1 (37)	2 (43)	3 (6)	4 (14)	_____
4. Conocimientos que el egresado adquiere sobre nuevas tecnicas o tecnologias o avances cientificos	1 (77)	2 (20)	3 (0)	4 (3)	_____
5. Difusion/ensenaza de nuevas tecnicas/conocimientos a que trabajan con los egresados	1 (63)	2 (31)	3 (0)	4 (9)	_____
6. Incrementos en la dedicacion del participante a su trabajo	1 (37)	2 (49)	3 (9)	4 (6)	_____
7. Mejor conocimiento del ingles	1 (43)	2 (40)	3 (14)	4 (3)	_____
8. Aumento en la produccion de la empresa	1 (60)	2 (26)	3 (6)	4 (9)	_____

APPENDIX C

MEMBERS OF THE EVALUATION TEAM

J. E. Austin Associates, Inc.

Tessie San Martin	--	Team Leader
Kevin Murphy	--	Focus Group Discussions
Zoraida Gonzalez	--	Survey Monitor/Dbase III+ development
Aida de Calderon	--	Logistics
G. Michael Lentz	--	Statistician/Dbase Programmer (Jack Faucett Associates)
Stephanie Mears	--	Dbase Programmer (Jack Faucett Associates)

Local Survey Team

Carmen Paredes	--	Survey Team Supervisor
Jorge Max Fernandez	--	Survey Consultant

Local Data Entry

Amilcar Medina	--	SPSS programmer
Bertrand de Windt	--	Data entry consultant

APPENDIX D

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