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FINAL REPORT:

FINDINGS COMPENDIUM AND ANALYSIS OF FY82
AID EVALUATION REPORTS

Contract No. AID/SOD/PPC-C-0391
Work Order No. 2

Conducted for the Program Evaluation Systems Division
of the Office of Evaluation (PPC/E/PES)
of the Agency for International Development

January 1984

TRITON =====

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PART I

The Office of Evaluation contracted with TRITON to conduct a meta-evaluation of its fiscal year 1982 evaluations. This was further sub-divided into two parts: the statistical analysis of the evaluations and their scores, and a findings compendium, which was to serve as both a qualitative reference guide and a quantitative analysis of the distribution of those findings. This report addresses the second of those two parts, but a brief introduction to the primary data base containing the evaluation scores is not unwise.

This data base was comprised of external and internal variables. The external variables contain such information as evaluation cost, geographic (i.e., bureau) distribution and host country participation. In essence, these refer to factors which are outside the control of the project's evaluators. Internal variables, on the other hand, refer to matters which are vital to the evaluation process itself and include such areas as design and data collection. The scoring of these variables was done by five coders. These variables were subsequently given weighted values and entered into the computer data base. The internal variables were used in the findings compendium only to provide a fast means of gauging the quality of the report. This is located on the right-hand side of the page for that project in the findings compendium, just below the logical framework, and displays plus or minus three standard deviations from the mean. One of the boxes will be filled in to show the appropriate value for each evaluation. This value is the quality score, derived from the internal variables one, four and six. These refer to evaluation design, data collection procedures are appropriate and adequate, and data analysis procedures are equally so.

The overall distribution of the external variables, in particular those which have an immediate effect on the findings is listed in Appendix A. These include the variables of bureau, technical focus, unit originating the evaluation, evaluation timing and codes. Other external variables which are defined and analyzed in the evaluation report are:

- o geocode
- o evaluation scope
- o host country participation in evaluation
- o project cost
- o number of levels evaluated
- o evaluation cost

o contractor codes

While these are, naturally, also a part of the findings, it was determined to be too repetitive to analyze all of these factors in terms of the findings. A certain trend, however, was noted for first order partials involving the cost of the projects and their evaluations. The following table summarizes the relationship between the number of findings per project with both evaluation cost and project cost. This table comprises the seven projects with no findings, and the ten projects with more than 10 findings. This shows that there is a tendency for more findings to be reported for more expensive projects and evaluations: due to the number of missing values for both types of cost, however, it is impossible to state definitely what caused what effect.

TABLE 1A

0 Findings

<u>Project Number</u>	<u>Project Cost</u>	<u>Evaluation Cost</u>
278-0221	5,050K - 10,149K	350 - 5,075
511-0457	M.	35,870 - 580,044
525-0191	5,050K - 10,149K	M
527-0176	5,050K - 10,149K	M
615-0185	0 - 949K	M
696-0100	950K - 5,049K	M
936-5716	10,150K - 22,149K	M
938-0138	M	M

10+ Findings

263-0101	10,150K - 22,149K	M
263-0103	10,150K - 22,149K	11,025 - 32,450
279-0238	950K - 5,049K	M
522-0155	0 - 949K	M
631-0017	0 - 949K	5,225 - 10,981
633-0084	0 - 949K	5,225 - 10,981
700-5024	M	M
621-0119.01	5,050K - 10,144K	35,870 - 580,044
664-0237.02	M	M
664-0312.01	M	M

The variables which were used in a more in-depth fashion in the findings study can be defined as follows.

- o BUREAU. This refers to the four regional bureaus, grouping their specific missions and regional offices under that. It also refers to the three central offices in charge of specific types of projects or evaluations. These are: Impact, Office of Science and Technology, and Office of Food and Voluntary Assistance. These will be referred to as Impact, S&T, and FVA henceforth.

- o TECHNICAL FOCUS. This refers to the specific coding used by AID to designate the topic of the project. It assigns three digit numbers in both the AID computer system and the indices: for the purposes of computer simplification, we have given them a single digit code which refers to the general heading for each of the codes.

For example, 512 "Reduce disease incidence-pilot or small-scale demonstration projects" is listed as simply 5, which is the generic code for health.

- o UNIT ORIGINATING THE EVALUATION. This refers to the AID entity responsible for the evaluation, i.e., a mission, regional office, or central bureau. This is described in the body of the findings, since the types of findings were found to be most easily determined by the types of projects found in specific bureaus.
- o EVALUATION TIMING. This refers to when the evaluation was performed in the life of the project. Most of the evaluations analyzed were interim ones. While this is noted in the body of the findings, one also remarks here that an interim report is going to concentrate on the design and implementation areas, while a final or ex-post evaluation has completed its task(s) and, thus, may look at all aspects of the report.
- o CODER. This refers, of course, to the individual who read and scored the evaluations. There were five coders over the life of the project. Their inter-rater reliability and the statistical analyses of their scores is found in the companion volume to this study.

PART II

Patterns of Findings

The purpose of this phase of the project was to help AID provide a ready reference for assistance in redesigning less successful projects or in replicating more successful ones. Recommendations, as well as findings, were included in the categorization scheme. Both were used to determine what differences existed over several of the external variables, specifically those we hypothesized as having the most impact over the types of findings. These findings were codified under the following Figure II.A.

Figure I

DESIGN

- o overly ambitious objectives
- o conflicting objectives
- o failed assumptions
- o missing inputs and outputs
- o scheduling and budget
- o recommendations and planned changes

IMPLEMENTATION

CONTRACTORS

- o problems finding U.S. contractors and personnel
- o problems finding host country contractors and personnel
- o commitment and performance of U.S. contractors and personnel
- o commitment and performance of host country contractors, government and personnel
- o commitment and performance of both U.S. and host country contractors and personnel

AID-RELATED IMPLEMENTATION

- o AID reporting requirements
- o contracting and funding procedures
- o coordination between AID and host countries
- o procurement of commodities
- o delay litanies
- o coordination between AID and contractor

INSTITUTION BUILDING

PROGRESS:

- o at the central level
- o with decentralization
- o at the community level
- o with timing

PROBLEMS WITH:

- o self-sufficiency and recurring costs
- o strategies and structures
- o training problems

DATA MANAGEMENT

- o collection and analysis
- o plans developed via that analysis
- o disseminating information

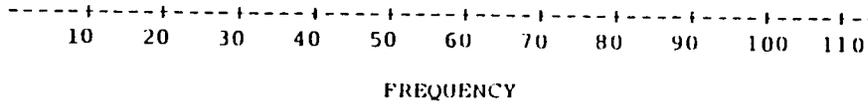
IMPACT

- o production impact
- o economic impact
- o social impact
- o spread/imitation effects

These categories were derived inductively using a categorization process which involved taking all of the written comments determining where the majority of them were grouped, and then assigning specific categories to them. These categories were defined and a numerical system was arranged in order to facilitate their entry into the computer system. Their distribution will now be analyzed, and, finally, definitions and specific examples of the categories and the entire scheme's rationale will be presented. Table I presents the overall distribution of the findings.

TABLE 1

CATEGORIES		FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
Design	11	*****	17	1.49	1.49
	12	*****	11	0.97	2.46
	13	*****	99	8.70	11.16
	14	*****	48	4.22	15.38
	15	*****	50	4.39	19.77
	16	*****	113	9.93	29.70
	21	*****	7	0.62	30.32
Implementation	22	*****	16	1.41	31.72
	23	*****	113	9.93	41.65
	24	*****	108	9.49	51.14
	25	*****	24	2.11	53.25
	31	*****	14	1.23	54.48
	32	*****	43	3.78	58.26
	33	*****	36	3.16	61.42
	34	*****	31	2.72	64.15
	35	*****	44	3.87	68.01
	36	****	7	0.62	68.63
	41	*****	48	4.22	72.85
Institution- Building	42	*****	11	0.97	73.81
	43	*****	53	4.66	78.47
	44	*****	33	2.90	81.37
	51	*****	26	2.28	83.66
Data Collection & Anal,sis	52	*****	39	3.43	87.08
	53	*****	20	1.76	88.84
	61	*****	55	4.83	93.67
	62	***	5	0.44	94.11
Impact	63	*****	17	1.49	95.61
	71	*****	12	1.05	96.66
	72	*****	21	1.85	98.51
	73	*****	11	0.97	99.47
	74	***	6	0.53	100.00



Overall, 1138 findings were generated from 266 projects. There is a very clear dominance in the frequencies for four of the categories. These are:

- o failed assumptions (99, 8.7%)
- o recommendations/planned changes (113, 9.9%)
- o commitment and performance of U.S. contractors and personnel (113, 9.9%)
- o commitment and performance of host country contractors, government and personnel (108, 9.5%)

The first are in the content area of design, while the latter two are involved with implementation. In general, all but recommendations/planned changes can be construed as negative findings: there was a particular problem--or set of problems--connected with the presence of any of those findings. Recommendations/planned changes, on the other hand, refers to any observation about the project's present implementation strategy, and is the primary mechanism for change in the evaluation itself. It is a strong indicator that the evaluations could be used as a specific learning device for the further design of projects. These will be analyzed in the third section.

All of the findings are analyzed in this report by their bureaus, technical codes and coders. The major conclusion drawn from the analysis is that the bureaus--as a variable--have the strongest impact on the findings. This is particularly visible with the Central Bureaus, since they concentrate on one type of project and, thus, produce a disproportionate amount of findings in that category. A good example would be Impact evaluations which had more findings in the impact categories: they are ex-post evaluations, and are looking for the results of the projects. The Office of Science and Technology also produces an analogous result: there are far more findings in the data management grouping than would be proportional for the number of projects analyzed. Once again, that Office stresses projects which have data collection and analysis as a major component, and as has its mandate the technical research and development which requires such data management.

The findings are drawn from a population of 282 evaluations, which had been operationally defined as those evaluations received by the Office of Evaluation in fiscal year 1982. These were listed in a memo from Nena Vreeland, and were subsequently reduced to 266 due to length or language. Because of the nature of the statistical tool, an evaluation of 10 or fewer pages might not contain adequate information in order for the instrument to be valid. Evaluations written in languages other than English were also deleted, primarily due to time constraints.

One should briefly describe, however, the universe of evaluations. Fiscal year 1982 is a short-hand designation for any evaluation received by the Office of Evaluation from September 1981 to September 1982. These evaluations were interim, final, ex-post or some combination of those, and range from being done by one mission to several missions to the regional offices, and, finally, to the Central bureaus.

The evaluation report deals with the results of the scoring of those evaluations, and analyzes any patterns which were observable. That data is primarily quantitative. The findings compendium is designed to be a ready reference tool, and to provide the reader with a means to judge the recorded strengths and weaknesses of some of AID's projects.

The findings were written out during the application of the instrument, and were intended to provide a more qualitative analysis of the evaluation. The coders were instructed to write down the principal findings, recommendations and/or conclusions from the evaluation, with a journalistic style encouraged. The findings were to be concise, pithy statements about the evaluations. These were, of course, far more subjective than the statistical instrument, since perceptions of importance varied from coder to coder, as did the writing styles for the findings. Two of the five coders wrote longer paragraphs presenting a complex mixture of information, while the other three coders limited themselves to individual sentences for each new type of finding. This latter style lent itself readily to the categorization scheme. The paragraphs, however, required extensive division into individual ideas, and generally resulted in higher means of findings per coder for those coders. Since these coders also read more than 160 of the evaluations, their perceptions strongly influence the overall distribution of the findings. This is especially true of Coder Three, who combined a strong regional bias with a focus--derived from an external, academic source--on institutional development.

The universe of these 266 evaluations calls for further explanation in order to assess the findings.

The evaluations are divided up among seven designated bureaus. These include four regional (Near East, Far East, Latin America and the Caribbean, and Africa) and three central ones (Impact, the Office of Science and Technology, and the Office of Food and Voluntary Assistance). One of the purposes of the initial study was to ascertain if differences existed among those bureaus: what the findings study is designed to do is to illuminate how and why they do or do not differ.

These seven bureaus are distributed as follows:

TABLE II

	<u>Frequencies</u>	<u>Percentages</u>
Near East	40	15.0
Far East	31	11.7
Latin America	49	18.4
Africa	92	34.6
Impact	16	6.0
S&T	26	9.8
FVA	12	4.5

This shows a clear dominance from the Africa bureau in terms of numbers of evaluations received in fiscal year 1982, largely due to the greater number of places producing evaluations.

within these bureaus, however, are further sub-divisions, usually (in the case of the regional bureaus) into missions. These are broken out into Table III. If one examines the regional bureaus alone, it is somewhat surprising to find the Near East Bureau--with the fewest missions--producing the most evaluations. There are several hypotheses for this result:

- A. More Near East projects had evaluations scheduled.
- B. The Near East Bureau has more projects proportionately to other bureaus.
- C. Some single mission is producing a disproportionate amount of evaluations, skewing the entire total upwards.
- D. Fewer missions lead to a greater concentration of personnel, and, hence, greater effort.

TABLE III

<u>BUREAU</u>	<u>NO. MISSIONS</u>	<u>NO. EVALUATIONS</u>	<u>AVG. NO.</u>	<u>PERCENTAGE OF TOTAL</u>
Near East	8	40	5.0	15.0
Far East	9	31	3.4	11.7
LAC	15	49	3.3	18.4
Africa	30	91	3.0	34.2
Impact	1	16	1.6	6.0
S&T	3	27	9	10.2
FVA	1	12	1.2	4.5

Hypothesis A cannot be evaluated from the data: it is just as likely that all the bureaus had proportionately equal numbers of evaluations scheduled, and only the Near East finished their quota.

Hypothesis B suffers from the same lack of data as Hypothesis A: since we only have the evaluation data, we cannot approximate the numbers of projects in each country. There is one factor at work here, however, which will also play a role in Hypothesis C. AID, traditionally, has disbursed more aid to those areas which are of the most value to the United States. Aid has never been distributed solely on the basis of need, but rather on the overall geopolitical scheme.

This argument leads directly into Hypothesis C. Of the 40 evaluations carried out for this bureau, fully 25% are in one country, Egypt. If you factor out for the Egyptian influence, the revised statistics for the Near East show:

	<u>NO. MISSIONS</u>	<u>NO. EVALUATIONS</u>	<u>AVG. NO.</u>	<u>PERCENTAGE OF TOTAL</u>
Near East	7	30	4.3	11.3

While this is still higher than the average number for other bureaus, it is no longer disproportionately so.

This argument can be further extended to the Latin America and the Caribbean bureau. Bolivia accounts for 10 of that bureau's 49 evaluations. The revised statistics for that bureau show:

	<u>NO. MISSIONS</u>	<u>NO. EVALUATIONS</u>	<u>AVG. NO.</u>	<u>PERCENTAGE OF TOTAL</u>
LAC	14	39	2.9	14.7

The final Hypothesis (D) is that fewer missions lead to a greater concentration of effort, with the result that more evaluations are produced. While this seems to hold true for the Near East Bureau, the hypothesis is shot down by the regional bureau with the next fewest number of evaluations. The Far East Bureau only involves one more mission than the Near East, but accounts for an average number of evaluations almost identical to those for the larger regional bureaus. So it is doubtful, from those cases, that fewer missions lead to better quality evaluations.

If one looks back at the evaluation data, one finds a certain relationship between a better evaluation being a more expensive one, which was broached at the beginning of the report. One might suppose, therefore, that an evaluation is better than another if it generates more findings. This type

of equation of quality with quantity is almost always misleading, and it would be more so than usual in this case.

Findings vary in number from zero to fifteen, with some interesting numbers cropping up with regards to who writes the most and which bureau has the most written about it. This is displayed in Tables IV A to E. These tables show the overall distribution of projects by number of findings broken out by their coders over the bureaus. Coder 2 and Coder 3 account for the vast majority of the larger categories. These two coders account for more than 50 percent of the findings in every bureau but the smallest (Food and Voluntary Assistance), with the following division of the world.

<u>Coders</u>	<u>Bureaus</u>
2	Near East, Far East, Africa, Science & Technology
3	Latin America, Impact

TABLE IV, A-E

<u>CODER 1</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Near East			1	1	1	2				1	
Far East			3	3							
LAC			3	1	3	1					
Africa		2	3	5	4						
Impact			1	1							
S&T			1		3						
FVA											
TOTAL		2	12	9	11	3				1	

Coder 1: Average Number of Findings by Bureau

NE = 5
 FE = 2
 LAC = 3
 AFR = 3
 IMP = 3
 S&T = 4
 FVA = -

Average Total = 6

CODER 2

	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
Near East					1	3	2	1	4		2	1	1			
Far East			1	1	3	2	2	2	1							
LAC				2		1		1	1							
Africa	1	1		1	6	9	6	1	4	2	1	1				1
Impact																
S&T			2	2	1	5	4	1		1						
FVA										1						
TOTAL	1	1	3	6	11	20	14	6	10	4	3	2	1		1	

Coder 2: Average Number of Findings by Bureau

NE = 8
FE = 5
LAC = 7
AFR = 6
IMP = -
S&T = 5
FVA = 9

Average Total = 6

<u>CODER 3</u>	0	1	2	3	4	5	6	7	8	9	10	11
Near East		1		1	2		2	2			1	
Far East		1	2	1	1	1	1	1				
LAC	1	3	2	7	8	4	3	2				
Africa		1	1	4	6		3	3				1
Impact				2	4	1	1	1		1	1	
S&T			1	1	1	1						
FVA			2	2	1							
TOTAL	1	5	8	18	23	7	10	9		1	2	1

Coder 3: Average Number of Findings by Bureau

- NE = 5
- FE = 4
- LAC = 4
- AFR = 5
- IMP = 5
- S&T = 4
- FVA = 3

Average Total = 4

<u>CODER 4</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Near East	1		2	5	1			1			
Far East		5									
LAC	2		1	1				1			
Africa	1	4	6	8	2	2				1	
Impact		1	1	1							
S&T				2							
FVA											
TOTAL	4	5	15	17	3	2		2		1	

Coder 4: Average Number of Findings by Bureau

NE = 3
FE = 2
LAC = 2
AFR = 3
IMP = 2
S&T = 3
FVA = -

Average Total = 3

CODER 5

	0	1	2	3	4	5	6	7	8	9	10
Near East											
Far East											
LAC						1				1	
Africa		1									
Impact											
S&T	1					1					
FVA		1	3	1		1					
TOTAL	1	2	3	1		3					

Coder 5: Average Number of Findings by Bureau

NE = -
FE = 5
LAC = -
AFR = 1
IMP = -
S&T = 3
FVA = 3

Average Total = 3

SAS

TABLE OF CODER BY BUREAU

TABLE V

Frequency Percent Row Pct Col Pct	1	2	3	4	5	6	7	Total
Coder 1	28	91	281	33	0	14	0	112
	2.46	0.79	2.46	2.90	0.00	1.23	0.00	9.84
	25.00	8.04	25.00	29.46	0.00	12.50	0.00	
	12.79	7.26	14.66	8.62	0.00	12.39	0.00	
Coder 2	122	75	46	197	0	79	9	528
	10.72	6.59	4.04	17.31	0.00	6.94	0.79	46.40
	23.11	14.20	8.71	37.31	0.00	14.96	1.70	
	55.71	60.48	24.08	51.44	0.00	69.91	23.68	
Coder 3	46	30	114	96	64	14	15	379
	4.04	2.64	10.02	8.44	5.62	1.23	1.32	33.30
	12.14	7.92	30.08	25.33	16.89	3.69	3.96	
	21.00	24.19	59.69	25.07	91.43	12.39	39.47	
Coder 4	23	10	3	57	6	6	0	105
	2.02	0.88	0.26	5.01	0.53	0.53	0.00	9.23
	21.90	9.52	2.86	54.29	5.71	5.71	0.00	
	10.50	8.06	1.57	14.88	8.57	5.31	0.00	
Coder 5	0	0	0	0	0	0	14	14
	0.00	0.00	0.00	0.00	0.00	0.00	1.23	1.23
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	
	0.00	0.00	0.00	0.00	0.00	0.00	36.84	
Total	219	124	191	383	70	113	38	1138
	19.24	10.90	16.78	33.66	6.15	9.93	3.34	100.00

This is not altogether surprising, as Coder 2 and Coder 3 read 64% of all evaluations. Table V regroups this information into the overall number of findings found for the bureaus. This reinforces Table IV's observations, and provides the matrix for the data in Table VI. One expects the number of their total findings to show a similar distribution, but, instead, those two account for 80% of all findings. They are writing proportionately more than the other coders, as the following table of averages shows clearly. This in turn affects the average number of findings per bureau.

TABLE VI

TABLE OF AVERAGES

<u>CODEK</u>	<u>TOTAL NO. OF FINDINGS</u>	<u>TOTAL NO. OF PROJECTS</u>	<u>AVERAGE</u>
1	112	38	3
2	528	83	6
3	379	86	4
4	105	49	2
5	14	10	1
Total	<u>1,138</u>	<u>266</u>	<u>4</u>

From Table VI, it is clear that Coder 2 wrote the most findings, with Coder 3 second by a fair margin (46% to 33%), despite the closeness of the numbers of evaluations read.

If one looks at the bureau averages depicted on Table VII, the difference becomes even clearer, since the tendency for the Near East Bureau to have a higher average number of findings is explained by the dominance of Coder 2's evaluations read in that bureau, while the lower proportion in FVA is due to the lower average of Coder 5, who read almost all of the FVA evaluations.

TABLE VII

BUREAU AVERAGES

<u>CODER</u>	<u>NO. FINDINGS</u>	<u>NO. EVALUATIONS</u>	<u>AVERAGE NO. FINDINGS</u>
Near East	219	40	5.5
Far East	124	31	4
LAC	191	49	4
Africa	383	91	4
Impact	70	16	4
S&T	113	27	4
FVA	38	12	3
Total	<u>1,138</u>	<u>266</u>	<u>4</u>

Coder 2 tended, overall, to use more findings per evaluation.

Once again, however, this endless quest for numbers falls astray with an explanation of how the findings were derived

All of the coders were instructed to write down the major conclusions and recommendations presented in the evaluations. This was to be a complementary, qualitative, portion of the analysis. The coders were further instructed to write pithy, concise statements: a sentence or two to describe any given phenomenon, with each phenomenon treated as a unique entity. This minimalist approach was used by Coders 1, 4 and 5. Coders 2 and 3 grouped their findings in long paragraphs, occasionally stretching to two pages. These magna opera had to be dissected almost clause by clause during the categorization process so that each phenomenon would be assigned its own category.

This type of split between two schools of narrative renders comparisons of average numbers of findings by coders fairly meaningless. It is useless in terms of the bureau descriptions, as later statistics will demonstrate anomalies in the various categories for the bureaus that can be easily explained by which coder did the majority of that bureau's evaluations.

PART III

Design and Implementation are the two largest categories in the scheme, accounting for 68.63% of all findings. These are, however, the major parts to all projects, and perhaps even more so with the present universe of information, since 65% of the evaluations were interim ones. This would mean in most cases that the project had only been underway for a short time, and the administrators had not had time to get all the bugs out. The combined contractor percentages (19.42) and the failed assumption one (8.7) are of particular interest, especially in that they describe the things that went wrong. These can be further divided into internal and external factors for failed assumptions on an almost 50-50 ratio. External, of course, refers to those things out of the control of even the Central Bureau: drought, political upheaval or a global economic crisis. Internal refers to some error on the part of the project designers, usually with regard to the interest/willingness of the host country population to participate in such an endeavor, or to the existence of non-existent infrastructure. These are only infrequently mitigated by a finding that expressed a cultural assumption (i.e., women would not participate) and the evaluators were amazed and delighted when it was disproven. Most of the internal failed assumptions are excessively aggravating, because it means that the designers did not take the trouble to conduct a sufficient analysis of "their" country before initiating the project. One can forgive ignorance of the external assumptions--after all, who can predict a natural disaster?--but it is hard to condone the other.

Contractor problems seem to plague any project, strongly affecting all of the bureaus except for Impact. Since Impact evaluations are ex-post evaluations, they concentrate more on the long-term effects of a particular project or group of projects, rather than on problems encountered during the project's life. Category 24 refers particularly to the commitment and performance of host country contractors, government and personnel. It is interesting to note that Category 24 is approximately equal to or else double Category 23 (which refers to U.S. contractor performance) for the four regional bureaus, divided in the following manner:

	<u>APP. EQUAL TO</u>	<u>DOUBLE</u>
CAT 23:CAT 24	Near East 26:25 Africa 30:33	Latin America 15:28 Far East 8:14

The Central Bureaus reverse this tendency, with two of the three bureaus strongly predominating Category 23 and the other remaining approximately equal. Impact Evaluations--as previously mentioned--did not report many contractor findings, but when they did, it was evenly divided at 2:3. Both S & T and

FVA had enormous differences, with the former at 23:4 and the latter at 9:1. Both of these are especially noteworthy, since, although there were fewer evaluations in these categories, these are proportionately more U.S. contractor biased by far than in any other bureau.

<u>BUREAU</u>	<u>CATEGORY 23</u>	<u>TOTAL FINDINGS</u>	<u>% OF BUREAU TOTAL</u>
Near East	26	219	11.9
Far East	8	124	6.5
LAC	15	191	7.9
Africa	30	383	7.8
Impact	2	70	2.9
S&T	23	113	20.4
FVA	9	38	23.7
Total	113	1,138	9.9

The majority of the findings in these three categories refer to specific problems with the project. The only other category which occurs as often is Category 16, Recommendations and Planned Changes. This group is composed entirely of suggestions to--or alterations in--the overall design and strategy of the project, usually in order for it to carry out its objectives. 9.9% of all findings fall in this category, although its percentage in the individual bureaus varies quite a lot.

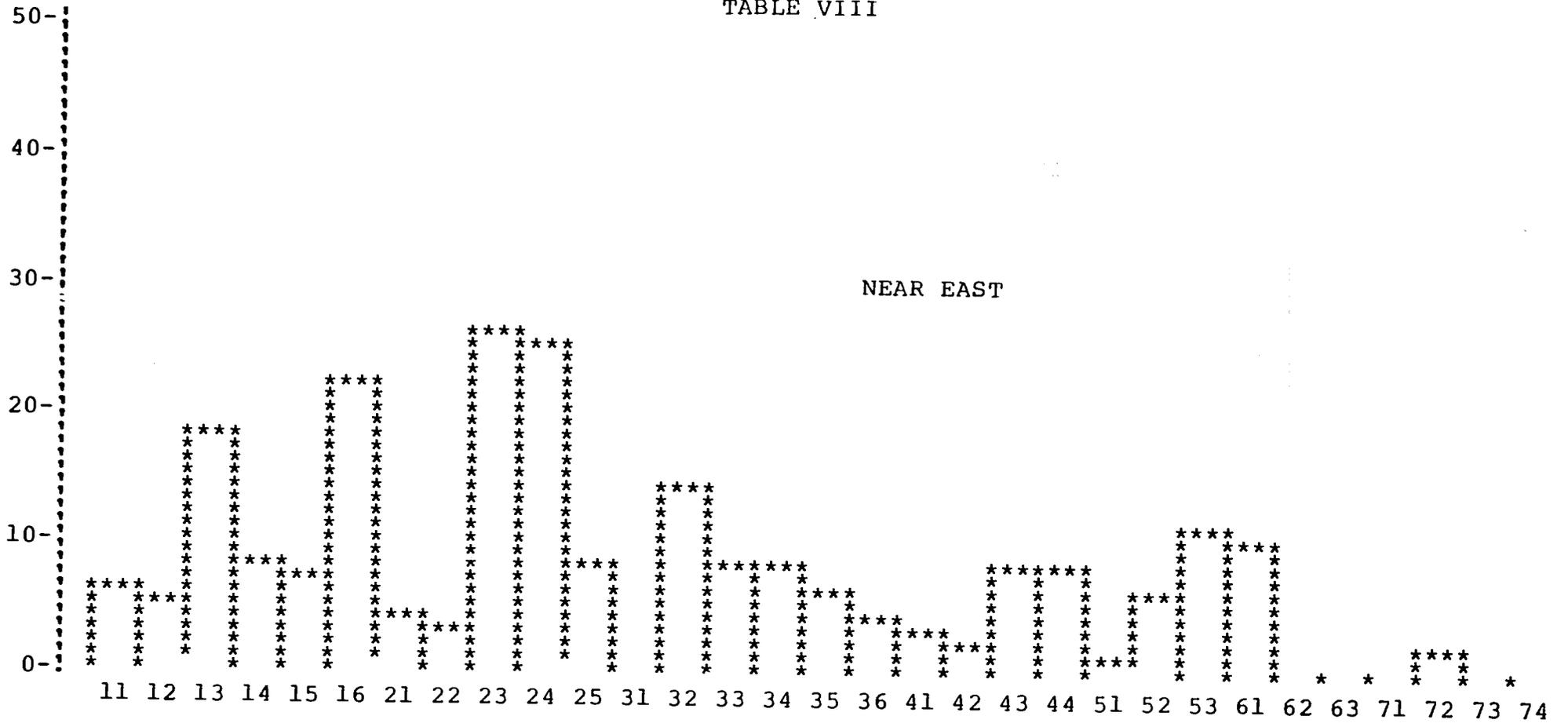
<u>BUREAU</u>	<u>CATEGORY 16</u>	<u>TOTAL FINDINGS</u>	<u>% OF BUREAU TOTAL</u>
Near East	22	219	10.0
Far East	15	124	12.1
LAC	13	191	6.8
Africa	43	383	11.2
Impact	3	70	4.5
S&T	11	113	9.7
FVA	6	38	15.8
Total	113	1,138	9.9

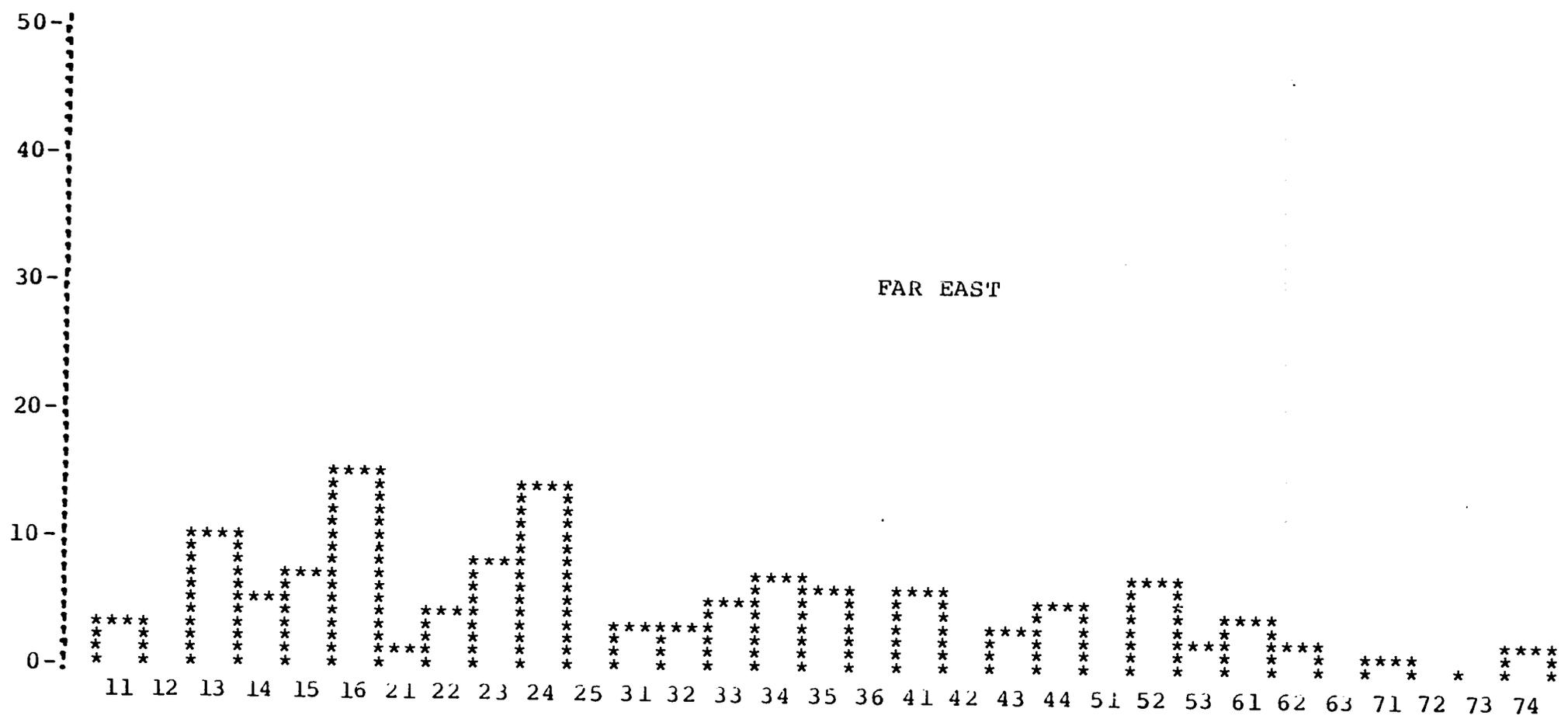
There are only two bureaus which fall significantly below the mean for this category. One might anticipate that Impact evaluations, being ex-post ones, have fewer suggestions on how to remedy a situation which no longer exists. It is odd that Latin America should have so few.

One possible hypothesis is that Coder 3, who did most of the Latin America and Impact evaluations, did not record any--or fewer--recommendations than the other coders. This type of coder bias is likely in view of the disproportionately high number of recommendations from FVA, most of which were written as part of Coder 5's few evaluations.

Table VIII shows the overall pattern of the bureaus by the individual categories. We will be examining these in greater depth statistically in the following pages, but it will suffice to note that those bureaus which stressed some particular area had findings which in turn reflected that particular stress. Thus, Impact evaluations focus on the effects and the impacts of projects. S & T focus as much on the mechanics of data collection and analysis as on the actual design and implementation of a project, while FVA stresses institution-building.

TABLE VIII



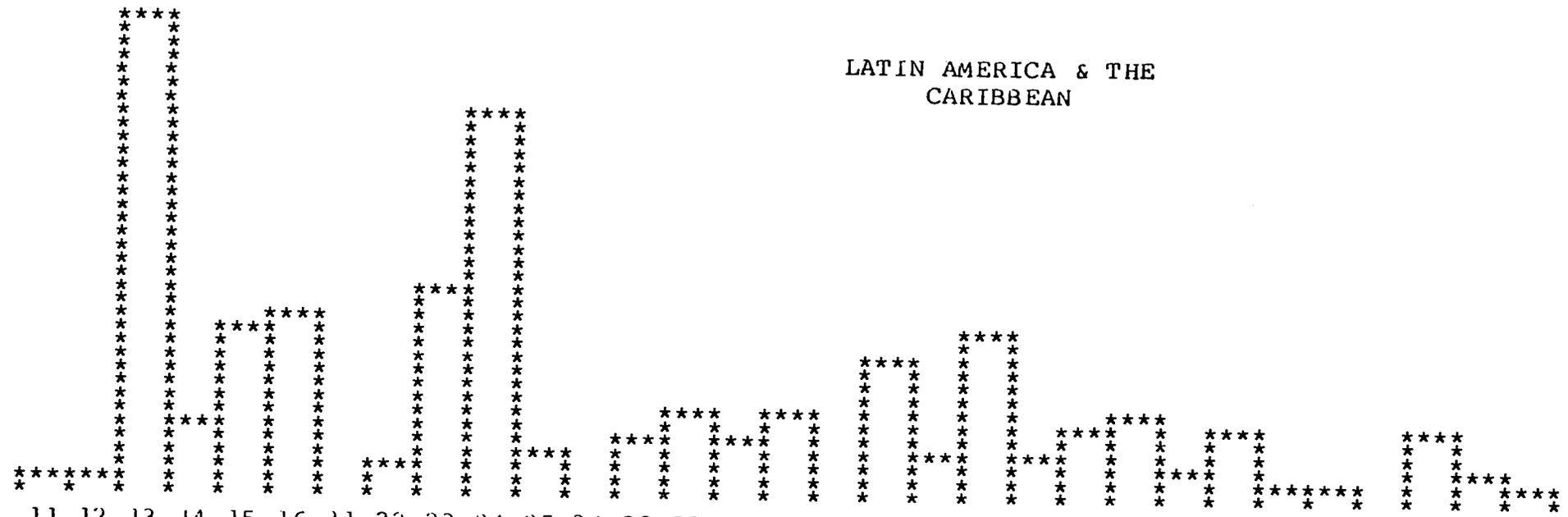


29

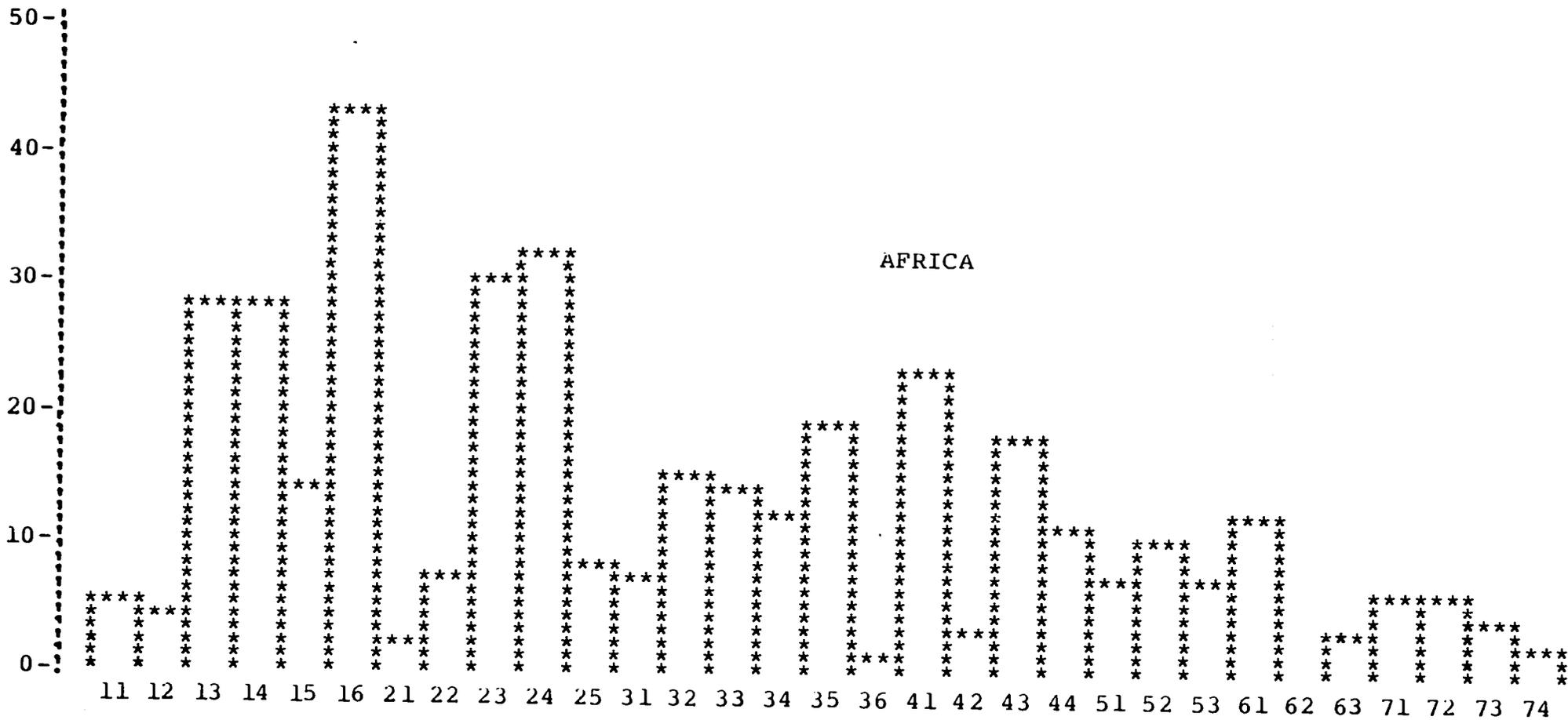
50-
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LATIN AMERICA & THE CARIBBEAN

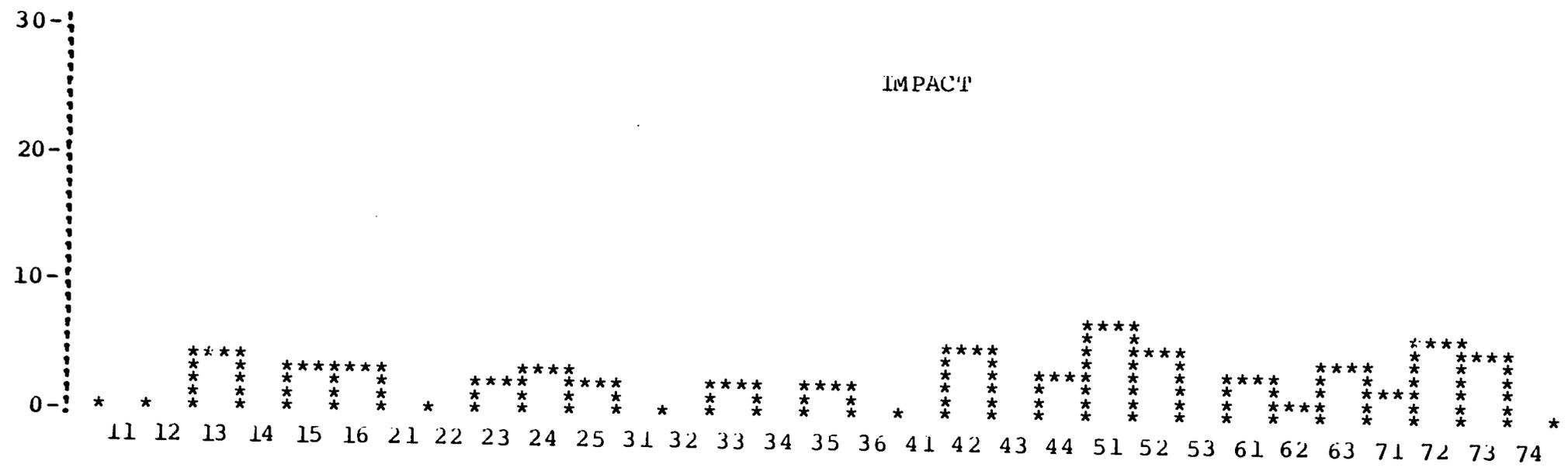
11 12 13 14 15 16 21 22 23 24 25 31 32 33 34 35 36 41 42 43 44 51 52 53 61 62 63 71 72 73 74



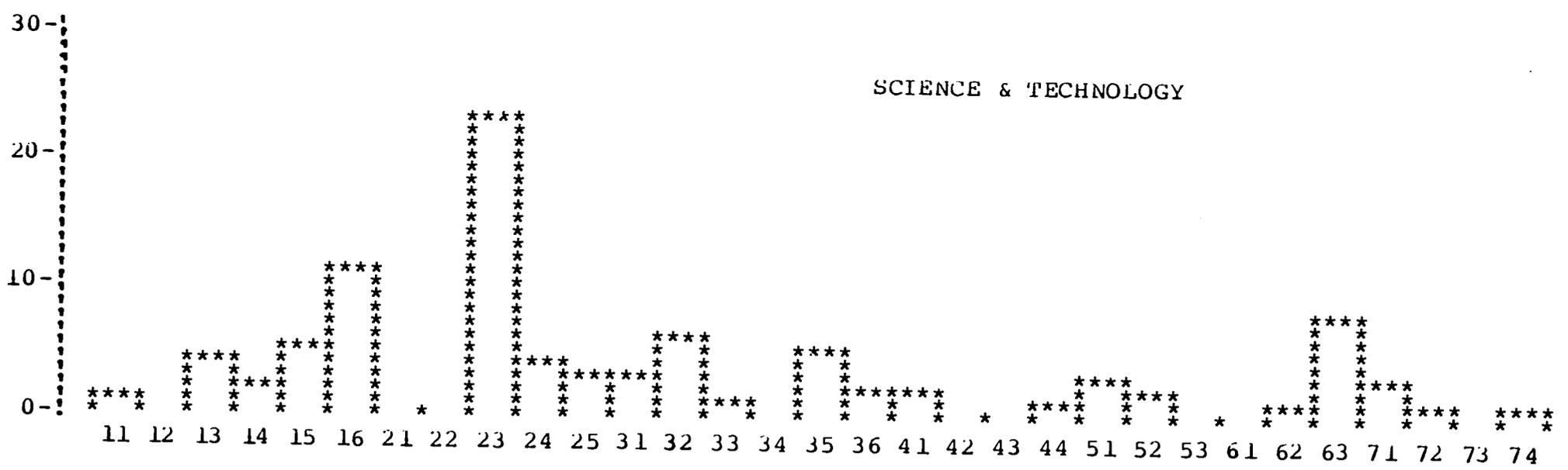
20



IMPACT



SCIENCE & TECHNOLOGY



FOOD & VOLUNTARY ASSISTANCE

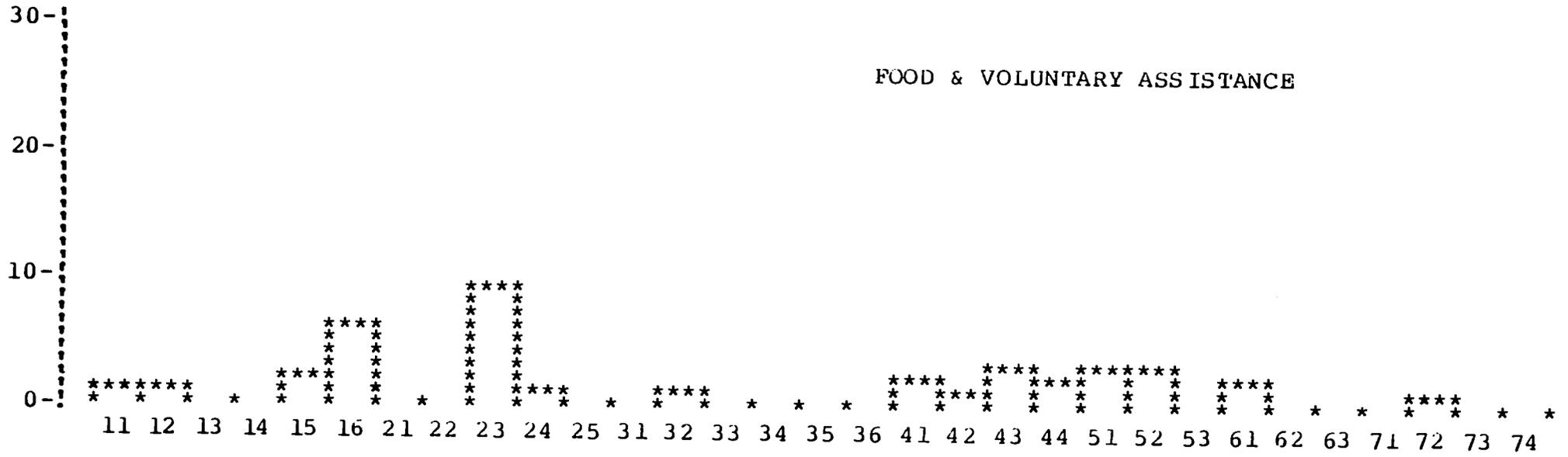


Table IX condenses this information into five major headings, usually designated as "recat" on the computer printouts, and provides a sort of generic overview of the distribution of the same findings. This provides more information in terms of what patterns the majority of the findings form, and highlights those instances where there are breaks in the basic pattern.

TABLE OF RECAT BY BUREAU

TABLE IX

RECAT Frequency Percent Row Pct Col Pct	BUREAU							Total
	1	2	3	4	5	6	7	
DESIGN	66	40	67	122	10	23	10	338
	5.80	3.51	5.89	10.72	0.88	2.02	0.88	29.70
	19.53	11.83	19.82	36.09	2.96	6.80	2.96	
	30.14	32.26	35.08	31.85	14.29	20.35	26.32	
IMPLEMENTATION	106	52	68	148	11	47	11	443
	9.31	4.57	5.98	13.01	0.97	4.13	0.97	38.93
	23.93	11.74	15.35	33.41	2.48	10.61	2.48	
	48.40	41.94	35.60	38.64	15.71	41.59	28.95	
INSTITUTION BUILDING	37	23	41	79	28	8	14	230
	3.25	2.02	3.60	6.94	2.46	0.70	1.23	20.21
	16.09	10.00	17.83	34.35	12.17	3.48	6.09	
	16.89	18.55	21.47	20.63	40.00	7.08	36.84	
DATA	8	6	7	16	8	30	2	77
	0.70	0.53	0.62	1.41	0.70	2.64	0.18	6.77
	10.39	7.79	0.09	20.78	10.39	38.96	2.60	
	3.65	4.84	3.66	4.18	11.43	26.55	5.26	
IMPACT	2	3	8	18	13	5	1	50
	0.18	0.26	0.70	1.58	1.14	0.44	0.09	4.39
	4.00	6.00	16.00	36.00	26.00	10.00	2.00	
	0.91	2.42	4.19	4.70	18.57	4.42	2.63	
Total	219	124	191	383	70	113	38	1138
	19.24	10.90	16.78	33.66	6.15	9.93	3.34	100.00

These recat categories form the generic base for project design and evaluation, and comprise five groups: design, implementation, institution-building, data and impact. It is through these broader categories that the general trends and patterns emerge, and those trends present basically few surprises. One would expect that Impact evaluations would concentrate more on the results side of the ledger (see diagram 1), as indeed they do, and that Science and Technology would be markedly stronger in data because their projects are almost always research oriented. The bureau would seem to determine the types of findings found if there is a general tendency in the bureau. We will be examining what effects the technical codes (i.e., the type of project, such as agriculture or health) have on the types of findings shortly.

Figure II

<u>PROCESS</u>		<u>RESULTS</u>
design	implementation	institution-building data impact

None of the regional bureaus account for over 5% of the data or impact recats, while the three central bureaus have over 5% in two-thirds of the cases, and over 10% in half. Proportionately more time and effort is focused on what the project has shown and done for those bureaus. This type of stress is borne out again in the institution-building, where Impact and FVA both put the greatest percentage of their bureau totals. This is diametrically opposed to the four regional bureaus, and, indeed, to S & T as well, which have their greatest bureau concentrations in implementation. If one divides Table IX into an even simpler chart, one emerges with the following pattern:

	<u>NE</u>	<u>FE</u>	<u>LAC</u>	<u>AFR</u>	<u>IMP</u>	<u>ST</u>	<u>FVA</u>
I. Process (Design and Implementation)	78	74	71	71	30	62	55
II. Results (Institution-Building, Data Impact)	22	26	29	30	70	38	45

Group I is always more than two times greater than Group II for the Regional Bureaus, while there is never that much disparity for the Central Bureaus. The only Central Bureau with a multiplicative factor greater than 1.5 is the Office of Science

and Technology, and the majority of that differential derives solely from their U.S. contractor findings, which make up 23 of the 47 findings for implementation. Latin America also emerges from Table IX as proportionately strong in institution-building. We will be examining some specific hypotheses of why this might be so when we examine both the technical code data and the coder/category dichotomies. Suffice it to say, however, that Latin America had 60% of its findings written by a single coder who may or may not have been looking for that specific type of development.

Table X shows the distribution of the findings arranged in recat groupings by the various coders. This makes it crystal-line that the majority of the findings were written by Coders 2 and 3--who did, after all, read 60% of the evaluations. What emerges, however, is the interesting deviation of Coder 5: while all other coders had more than 60% of their findings in the design and implementation group, Coder 5 had the same amount in those categories as in institution-building alone. While this is not statistically overwhelming, in view of the small number of findings written, it is interesting as a trend since Coder 5 only read those evaluations from the Office of Food and Voluntary Assistance. This distribution accounts for 14 of the 38 findings for that office and shifts the overall distribution of that office to the right.

TABLE OF CODER BY RECAT

TABLE X

CODER	RECAT						Total
	Design	IMP	Instbldg	Data	Impact		
Frequency							
Percent							
Row Pct							
Col Pct							
Coder 1	27	41	24	8	7	107	
	2.37	3.60	2.11	0.70	0.62	9.40	
	25.23	38.32	22.43	7.48	6.54		
	7.99	9.26	10.43	10.39	14.00		
Coder 2	176	219	84	40	13	532	
	15.47	19.24	7.38	3.51	1.14	46.75	
	33.08	41.17	15.79	7.52	2.44		
	52.07	49.44	36.52	51.95	26.00		
Coder 3	99	136	96	24	24	379	
	8.70	11.95	8.44	2.11	2.11	33.30	
	26.12	35.88	25.33	6.33	6.33		
	29.29	30.70	41.74	31.17	48.00		
Coder 4	34	43	20	3	6	106	
	2.99	3.78	1.76	0.26	0.53	9.31	
	32.08	40.57	18.87	2.83	5.66		
	10.06	9.71	8.70	3.90	12.00		
Coder 5	2	4	6	2	0	14	
	0.18	0.35	0.53	0.18	0.00	1.23	
	14.29	28.57	42.86	14.29	0.00		
	0.59	0.90	2.61	2.60	0.00		
Total	338	443	230	77	50	1138	
	29.70	38.93	20.21	6.77	4.39	100.00	

One also notes, as mentioned previously, Coder 3's propensity to write institution-building findings: they account for 25.3% of his total findings, but result in 41.7% of all institution-building findings. This is especially noteworthy in view of the fact that Coder 2, despite almost half again the number of overall findings, had far less, proportionately, in that category. This table also makes explicit the relationship between the Central Bureaus and the types of findings written. These two Coders read almost all the S&T and Impact evaluations, and their findings together comprise more than 70% of all findings written for the categories of data and impact. If one looks at the distribution over the first three groupings for Coders 1 and 4, an interesting comparison emerges. Despite almost identical numbers of findings, Coder 1 shows a pronounced drift to the right for the first three categories, while the opposite is true for Coder 4. We will be examining this motion more closely during our analysis of the technical codes and bureaus to see if there are discernible reasons for that movement.

Table XI describes the distribution of the types of projects over the bureaus. Technical code is a designation by AID for specific kinds of projects. The index lists them as does AID, with three digit numbers. For the purposes of computer analysis and a better general understanding, these technical codes were collapsed into ten general categories, which represent the main headings of the AID classification. Collapsed for ease in computer analysis, these provide the following generic headings. These are:

- o Agriculture
- o Rural Non-Agriculture Activities
- o Rural Multi-Functions
- o Nutrition
- o Population
- o Health
- o Education
- o Human Resource Development
- o Infrastructure & Housing
- o Other

TABLE OF RETEC BY BUREAU

TABLE XI

RETEC TECHNICAL CODE BUREAU

Frequency Percent Row Pct Col Pct	Near East	Far East	Latin America & Caribbean	Africa	Impact	Science & Technology	Food & Voluntary	Total
Agr i	59 5.18 11.66 26.94	72 6.33 14.23 58.06	57 5.01 11.26 29.84	165 14.50 32.61 43.08	70 6.15 13.83 100.00	45 3.95 8.89 39.82	39 3.34 7.51 100.00	506 44.46
Rurnonag	3 0.26 8.57 1.37	0 0.00 0.00 0.00	15 1.32 42.86 7.85	17 1.49 48.57 4.44	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	35 3.08
Rurmulti	28 2.46 43.75 12.79	0 0.00 0.00 0.00	14 1.23 21.88 7.33	22 1.93 34.38 5.74	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	64 5.62
Nutri	0 0.00 0.00 0.00	0 0.00 0.00 0.00	11 0.97 57.89 5.76	0 0.00 0.00 0.00	0 0.00 0.00 0.00	8 0.70 42.11 7.08	0 0.00 0.00 0.00	19 1.67
Pop	2 0.18 10.00 0.91	2 0.18 10.00 1.61	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	16 1.41 80.00 14.16	0 0.00 0.00 0.00	20 1.76

Frequency Percent Row Pct Col Pct	Near East	Far East	Latin America & Caribbean	Africa	Impact	Science & Technology	Food & Voluntary	Total
Health	35	16	5	34	0	0	0	90
	3.08	1.41	0.44	2.99	0.00	0.00	0.00	7.91
	38.89	17.78	5.56	37.78	0.00	0.00	0.00	
	15.98	12.90	2.62	8.88	0.00	0.00	0.00	
Ed	37	4	44	30	0	0	0	115
	3.25	0.35	3.87	2.64	0.00	0.00	0.00	10.11
	32.17	3.48	38.26	26.09	0.00	0.00	0.00	
	16.89	3.23	23.04	7.83	0.00	0.00	0.00	
Hrd	18	0	11	35	0	3	0	67
	1.58	0.00	0.97	3.08	0.00	0.26	0.00	5.89
	26.87	0.00	16.42	52.24	0.00	4.48	0.00	
	8.22	0.00	5.76	9.14	0.00	2.65	0.00	
Infra	23	6	25	40	0	10	0	104
	2.02	0.53	2.20	3.51	0.00	0.88	0.00	
	22.12	5.77	24.04	38.46	0.00	9.62	0.00	
	10.50	4.84	13.09	10.44	0.00	8.85	0.00	
Other	14	24	9	40	0	31	0	118
	1.23	2.11	0.79	3.51	0.00	2.72	0.00	10.37
	11.86	20.34	7.63	33.90	0.00	26.27	0.00	
	6.39	19.35	4.71	10.44	0.00	27.43	0.00	
Total	219	124	191	383	70	113	38	1138
	19.24	10.90	16.78	33.66	6.15	9.93	3.34	100.00

A word of caution is needed, however, before we can proceed with an examination of the current table. It will be remarked that all of the Impact and FVA projects are coded as agriculture. This is patently untrue, as an examination of the titles of those evaluations will prove, but resulted from coding all evaluations for which no technical codes had been given as blank. This was read by the computer as a zero, and resulted in their misinterpretation as agriculture. This will be dealt with in an upcoming corrigenda, as soon as that data is made available to us from the indexer.

There are still a few useful observations from the table, and we will examine them by bureau.

The Near East Bureau accounts for a much more varied distribution of projects than do the other, with greater numbers in several categories than one would expect in proportion to its size. This is true for rural multi-functions, health, education and infrastructure.

The Far East Bureau has a similar disproportion for health and the "other" category.

The Latin American and Caribbean Bureau shows a larger concentration than any other in education, and less than any other regional bureau in health. LAC also accounts for proportionately more infrastructural projects than the other regional bureaus, although the differences are not as great as in education.

The Africa Bureau is unusual insofar as the health, education, human resource development, infrastructure and other categories all have approximately equal concentrations of findings.

Science and Technology is another bureau with a high percentage (27.4) in the "other" category.

The tables of the individual categories by Coder and Bureau are listed in Appendices B and C. Several points, however, could be made about the distributions in both cases.

Briefly, Coders reflected the major trends already noted, with Coder 2 and Coder 3 dominating every category. Coder 2 accounted for more than 60% of the findings in seven categories:

11. Overly ambitious objectives
14. Missing inputs and outputs
21. Problems finding U.S. contractors and personnel

- 22. Problems finding host country contractors and personnel
- 31. AID reporting requirements
- 53. Problems with training
- 62. Plans

Coder 3 accounted for more than 60% in only three categories:

- 42. Progress in institution-building: decentralization
- 43. Progress in institution-building at the community level
- 73. Social impact

The findings themselves are distributed over 31 categories, with five major headings. These categories were derived inductively by Roger Popper after reading through all of the findings. As we shall see in the comparative analysis, these often follow the same general patterns as other studies of this nature. This is scarcely a surprise, since all of the studies were from approximately the same universe of data, which in turn was aligned accordingly to a general paradigm for project design.

Once again, the categories comprise the following headings/categories:

LIST 1

- | | |
|----------------|---|
| DESIGN | <ul style="list-style-type: none"> 11) Overly ambitious objectives 12) Conflicting objectives 13) Failed assumptions 14) Missing inputs and outputs 15) Scheduling and budget 16) Recommendations and planned changes |
| IMPLEMENTATION | <ul style="list-style-type: none"> 21) Problems finding U.S. contractors and personnel 22) Problems finding host country contractors and personnel |

- 23) Commitment and performance of U.S. contractors and personnel
 - 24) Commitment and performance of host country contractors, government and personnel
 - 25) Commitment and performance of both U.S. and host country contractors and personnel
 - 31) AID reporting requirements
 - 32) Contracting and funding procedures
 - 33) Coordination between AID and host countries
 - 34) Procurement of commodities
 - 35) Delay litanies
 - 36) Coordination between AID and contractor
- INSTITUTION-BUILDING
- 41) Progress in institution-building at the central level
 - 42) Progress in institution-building via decentralization
 - 43) Progress in institution building via training
 - 51) Problems with self-sufficiency and recurring costs
 - 52) Problems with strategies and structures
 - 53) Problems with training
- DATA BASE
- 61) Data collection and analysis
 - 62) Plans
 - 63) Disseminating information
- IMPACT
- 71) Production impact
 - 72) Economic impact

73) Social impact

74) Spread/imitation effects

The overall average for findings is four. If one looks again at the averages for the coders generated by Table III, one emerges with the following list:

CODER	AVERAGE FINDINGS
1	3
2	6
3	4
4	3
5	3

There is a general tendency for Coders 2 and 3 to do the most findings (which has been previously discussed). If one then examines the highest and lowest scoring evaluations, a more pronounced differentiation in means of findings per project becomes visible.

Table XII provides the data for this analysis, containing those scores in the lowest three deciles and those in the top two, together with their scores, coders and number of findings.

TABLE XII

Lowest Scores

<u>CODER</u>	<u>PROJECT</u>	<u>SCORE</u>	<u>NO. FINDINGS</u>
3	4970273	10.3456	0
3	9311026	12.3516	2
3	4980265	13.3458	3
2	5110460	15.4970	3
4	6690122	16.0653	3
4	6850218	17.3139	4
4	6690160	18.6248	2
4	3860466	18.8169	2
3	6980414	19.9365	3
3	5320055	22.6209	2
2	9311223	24.3762	5
3	5110471	24.4499	3
2	9365701	24.5994	2
4	5150158	24.6325	3
3	3830042	24.6618	6
3	5220179	25.5533	4

Total No. Projects = 16
Average No. Findings = 3

Highest Scores:

3	3679001	78.0700	5
3	938013202	78.2388	4
3	2630101	78.5857	10
3	9380146	79.0542	2
3	621011901	79.4977	11
2	6150185	79.5493	0
3	6324801	80.0387	7
2	5220150	80.4240	8
2	698041022	80.7967	5
4	5270161	80.8774	2
4	2790044	82.1069	7
3	5110522	82.7244	5
3	5270158	82.8877	7
2	6860212	83.3154	4
2	6310017	84.1833	11
2	6330084	85.2583	10

Total No. Projects = 16
Average No. Findings = 6

Judging from the average numbers for each of the seven score groups, there is a tendency for higher scoring projects to produce more findings. This holds even if the findings for Coder 2 are discounted; Coder 2 had a much higher average for findings than the other coders. In both scoring groups, Coder 3 is responsible for the majority of cases, accounting for 50% in the lowest scoring group and in the highest scoring group. The average number of findings for his projects exactly reflects the number of findings in both the scoring groups. It is the range in each case, however, which provides a clue in this table's analysis.

Was this
built into
the scoring
instrument
itself???

The lowest scoring group has a range of 6, while the highest group has a range of 11. The projects for Coder 3 run the gamut of the lowest scoring group, and then range from 2 to 11 in the highest group. While there is a tendency for the higher deciles to produce more findings on the average, there is too great a range to be able to state conclusively that higher scoring evaluations have more findings than lower-scoring evaluations. This is, again, caused by the lack of consensus as to the scope and content of findings. A consistent format must be used if sheer numerical analysis is to unearth anything of significance.

|| ↑
yes!

A statistical analysis of the bureau by major category groupings for each coder was performed. This is presented as Table XIII. There were no concentrations of findings in any of the categories or bureaus for Coders 1, 4 or 5, although there was a trend in both Coders 1 and 4 for the Africa Bureau to have proportionately more institution-building, data and impact findings than any other regional bureau. This was only altered in Coder 1's LAC bureau, and we will be examining in the next section as to whether the purpose of the evaluation might have a specific bearing on this observation.

TABLE XIII

	<u>DESIGN</u>	<u>IMPLEMENTATION</u>		<u>INST. - BUILDING</u>		<u>DATA</u>	<u>IMPACT</u>
<u>CODER 1</u>							
Near East	4	13	4	7	0	0	0
Far East	3	3	0	1	1	0	1
LAC	12	1	4	4	3	3	1
Africa	6	5	4	3	2	4	4
S&T	2	7	0	1	2	1	1
<u>CODER 2</u>							
Near East	42	31	24	10	13	1	1
Far East	22	14	19	8	6	5	1
LAC	22	14	2	0	4	2	2
Africa	70	45	39	21	13	8	5
S&T	18	13	15	2	3	24	4
FVA	2	3	0	2	2	0	0
<u>CODER 3</u>							
Near East	14	13	9	4	1	5	0
Far East	11	8	4	4	2	1	0
LAC	32	33	14	23	5	2	5
Africa	26	22	12	25	3	3	5
Impact	9	7	2	15	10	8	13
S&T	1	7	1	0	0	5	0
FVA	6	4	0	3	1	0	1
<u>CODER 4</u>							
Near East	6	9	3	0	2	2	1
Far East	4	2	2	1	0	0	1
LAC	1	0	0	1	1	0	0
Africa	20	8	13	6	6	1	4
Impact	1	0	2	1	2	0	0
S&T	2	3	1	0	0	0	0
<u>CODER 5</u>							
FVA	2						

Coders 2 and 3, however, had significant numbers of findings disproportionate to the anticipated. This occurred for Coder 2 in the data category for the Office of Science and Technology, which totaled 24 findings of a total of 79 (30.38%). At the same time, there are proportionately fewer institution-building findings for that office than for any other bureau, comprising 6% of that bureau's total. Coder 3 also reflects this, as he recorded no findings at all for the institution building category of S&T. Coder 3 had a particular bias towards institution-building, as is reflected in the greater percentages for that general category. Despite this apparent bias, S&T still had no observations made about the project's sustainability, and how it was affecting the host country. There are several hypotheses for this conspicuous absence. First of all, S&T does primarily research, and its impact on a community is limited fairly strictly to extension activities, which have a separate heading under this categorization. Second, we have surely established by now that absence of findings does not necessarily denote the lack in the evaluation, although this coder would probably have gone looking for comments in that topic. Third, the overall proportion of all coders of S&T institution-building to total findings is always lower than any other bureau in that category, and, in fact, S&T institution-building is always under 10% of all cases, except for those findings done by Coder 1. This will also be examined in the technical code section.

PART IV

TECHNICAL CODES

The technical codes used in this analysis are the result of the necessity of smaller groupings for computer analysis, so the three digit code has been shortened so that only the first digit was used. This provides nine groups:

- o agriculture
- o rural: non-agricultural activity
- o rural: multi-function
- o nutrition
- o population
- o health
- o education
- o human resource development
- o infrastructure and housing
- o other

These technical codes are distributed over the categories in ways which would seem to reflect the bureaus' own concentration on a specific topic, and this is further reinforced by the absence of techcodes from some of the bureaus entirely.

The Near East Bureau is missing rural: multi-function, while the Far East lacks any evaluations on rural: non-agricultural activities, rural: multi-function, nutrition and human resource development. Latin America lacks evaluations on population, while Africa lacked evaluations on both population and nutrition. This is, again, equally reflective of the coding scheme used.

Breaking these technical codes out by the major categories reveals the overwhelming concentration on all facets of data for the Office of Science and Technology: none of their evaluations has less than 10% findings for each technical code in that category. Those individual scores are still greater than some of the total scores for data done by the regional bureaus. The only bureau which comes close to that total is Impact: that office has all available resources looking at the results/effects of a project, all of the information has been gathered and they are concentrating on what types of extensions were used. It is, again, a logical concentration. If one looks at the category of institution-building, one finds some interesting correspondences among technical codes for the regional bureaus. In three out of four bureaus (with the Far East being the exception), rural: non-agricultural activities had the highest or among the highest percentage of institution-building findings, with the next highest correlation being human resource development.

The Latin America and Caribbean Bureau is the strongest regional bureau, with 22% of its total findings in that category, but the other regional bureaus do not lag by much: Africa accounts for 22%, the Far East for 19% and the Near East for 17%. Both Impact and Food and Voluntary Assistance have larger amounts in that category, Impact significantly so at 70%. Science and Technology only accounts for 7% of its findings in that category, half of which is clustered in the technical code for "other."

We will be examining technical codes in the following pages with regards to their distribution by coder in order to determine if there is a pattern to Coder 1's concentration of findings for the Latin America and Caribbean bureau, and also to ascertain if one technical code predominated for Coders 2 and 3 who had such large percentages across the board.

Agriculture is the predominant technical code for all coders, but if one looks at the other technical codes which comprise more than 10% of all findings, the following results emerge. These were derived from Table XIV.

<u>CODER</u>	<u>TECHNICAL CODES</u>
1	human resources, other
2	education, other
3	education, infrastructure and housing
4	rural: multi-function, health, education
5	--

These are then cross-referenced by the particular bureaus in which they occurred, an exercise which produces the following concentrations.

TECHNICAL CODES: BUREAUS (rank ordered)

CODER 1	human resources: Near East, LAC; other: Africa, LAC, S&T
CODER 2	education: Africa, Near East, LAC; other: S&T, Africa, Near East, Far East, LAC
CODER 3	education: LAC, Near East, Far East; infrastructure and housing: Near East, Africa, LAC
CODER 4	rural: multi-function: Near East, Africa, LAC; health: Africa, Near East; education: Near East, Africa, Far East

In examining Coder 1, in particular, one finds that the bureaus of LAC and the Near East show a distribution similar to those of Coders 2 and 3, while the greater number of evaluations analyzed by those coders increases the likelihood of a more

widespread distribution of those technical codes. This is borne out by Coder 4, who, although she did not read as many evaluations as Coders 2 and 3, did read proportionately more in the Africa Bureau, as her technical code distribution shows.

While it was not unusual for a coder to record findings in any one technical code for more than three bureaus (apart from Agriculture), this did occur several times for both Coders 2 and 3. Health, Infrastructure and Housing, and Other were the codes for Coder 2, while Coder 3 found this for Education and Other. The "Other" technical code was used almost chronically for the Office of Science and Technology, and its disproportionate use is reflected here.

While there are 10 discrete technical codes, certain bureaus had a wider distribution in general than did others, even taking into account that no coder used all 10 technical codes. The most common absences occurred from nutrition and population: that is, again, reflective of the lack of accurate coding for Food and Voluntary Assistance. These result in average distributions contained in the following list:

Near East	6
Far East	3
LAC	5
Africa	6
Impact	-
S&T	3
FVA	-

TABLE XIV

	0)	1)	2)	3)	4)	5)	6)	7)	8)	9)
<u>CODEK 1</u>										
Near East	5				2	5	4	9	3	
Far East	7				2					
LAC	17									
Africa	17	1					2	3	2	4
S&T	4			8					4	6
										2
<u>CODEK 2</u>										
Near East	44		21			22	20	9	1	5
Far East	35					12			4	24
LAC	15	2				5	10		13	1
Africa	67	14	18			10	22	24	20	26
S&T	29				16				7	27
EVA	9									
<u>CODEK 3</u>										
Near East	5					6	7		19	9
Far East	24					4	2			
LAC	25	15	11	11			32	3	10	4
Africa	52	2				14	4	3	11	5
Impact	64									
S&T	12									
EVA	15									2
<u>CODEK 4</u>										
Near East	5	3	7			2	6			
Far East	9						2		2	
LAC			3							
Africa	29		4			10	4	3	5	3
Impact	6									
S&T								3	3	
<u>KEY</u>										
0)	Agriculture									
1)	Rural: Non-Agriculture									
2)	Rural: Multi-Function									
3)	Nutrition									
4)	Population									
5)	Health									
6)	Education									
7)	Human Resources									
8)	Infrastructure and Housing									
9)	Other									

PART V

This section deals with the dichotomies introduced by comparing an individual coder against the rest of the group by any individual category against all other categories. This serves to establish a relationship more strongly between how the coder wrote findings and how that compares with the overall population. We will then be examining another set of dichotomies, this time using the coder/other coders variable by the major categories against all other major categories. This recombination serves to emphasize a more macro-oriented breakdown of the findings.

Briefly, Coder 1 revealed many fewer observations for category 16 (recommendations) than did other coders, but proportionately more for category 13 (failed assumptions). (The means of determining anomalies was the probability for the chi-square value being less than 5%.) Coder 1 had far fewer findings for both categories 31 and 33 (AID reporting requirements and coordination between AID and host country, respectively). The absence of findings in categories 36 and 42 (coordination between AID and contractor and progress with decentralization) also account. Categories 44, 51, 71, 73 and 74 also had probabilities under 5%. Categories 44, 71 and 74 had proportionately more: these refer to institution-building progress via training, and production impact and spread effects. Categories 51 and 73 had proportionately less: these refer to problems with self-sufficiency and social impact.

Coder 2 had probabilities of under 5% for all categories except the following proportionately more than the other coders.

- 12 Conflicting objectives
- 23 Commitment and performance of U.S. contractors and personnel
- 33 Coordination between AID and host countries
- 36 Coordination between AID and contractor
- 52 Problems with strategies and structures for institution-building
- 61 Data collection
- 62 Plans
- 71 Production impact.

Coder 3 has proportionately fewer and more findings as displayed in the following schema:

MORELESS

12	Conflicting objectives	11	Overly ambitious objectives
13	Failed assumptions	14	Missing inputs and outputs
15	Scheduling and budget	21	Problems finding U.S. contractors and personnel
16	Recommendations and planned changes	22	Problems finding host country contractors and personnel
24	Commitment and performance of host country contractors, government and personnel	31	AID reporting requirements
25	Performance and coordination of both host country and U.S. contractors, personnel and government	53	Training problems
32	Contracting and funding procedures		
34	Procurement of commodities		
35	Delay litanies		
41	Progress at the central level		
42	Progress with decentralization		
43	Progress at the community level		
51	Self-sufficiency and recurrent costs		
52	Strategies and structures		
72	Economic impact		
73	Social impact		

This, as we will determine in the more general categories' analysis, reflects most accurately the predominance of both the institution-building and impact categories supporting the evidence of that coder having scored more impact evaluations, and of having concentrated on the subject of institution-

building over the course of his analysis.

Coder 4 had a very different distribution of proportions.

<u>MORE</u>		<u>LESS</u>	
16	Recommendations and Planned Changes	11	Overly ambitious objectives
24	Commitment and performance of host country contractors, government and personnel	13	Failed assumptions
33	Coordination between AID and host country	21	Problems finding U.S. contractors and personnel
35	Delay litanies	22	Problems finding host country contractors and personnel
52	Strategies and structures	36	Coordination between AID and contractors
73	Social impact	51	Self-sufficiency and recurrent costs
		61	Data collection
		63	Disseminating information
		71	Production impact
		74	Spread/imitation effects

Many of these categories where proportionately less were scored did not include any findings at all. In neither more nor less proportion, however, was there a particular concentration in any area except for data. This can be explained by the lack of S&T evaluations scored by this coder.

Coder 5 will not be used at this stage of the analysis because of the scarcity of his findings over the individual categories.

The more general categories of Design, Implementation, Institution-Building, Data and Impact were tabulated to see if the individual categories' proportions would become stronger or would disperse in a broader framework.

Coder 1 had proportionately more only for Impact, "more" being very broadly defined as half again as much as the values for the other general categories.

Coders 2 and 3, however, had rather different parameters, with "more" defined as greater than 40% for that category. This leaves Design, Implementation, and Data for Coder 2, with Institution-Building and Impact for Coder 3.

Coder 4 remains grouped about the 10% mark, with the only deviation still being data at 3.9%--significantly below all of the other findings.

Coder 5 never accounted for more than 5% on any of the major groupings: again, not surprisingly, since he read so few evaluations in the first place.

PART VI

Several other people have used a similar process in analyzing AID evaluations. While the universe of evaluations differs very strongly in all of the three examined, it is still useful to see how the categories overlap. They are presented in tabular form on Table XV. At first glance, the categories are grouped for Barnett & Engel as either design (the vast majority) or as implementation. While this reflects the purpose of their study--a guide to effective institution-building--as well as the implicit need to devise a remedy for the problems, it also results in far less overall merging of Popper's categories. The Barnett categories are almost all distributed in a far more general sense than Popper's, rendering all of his implementation categories in one big pile of overlapping values. Categories 2 and 5 comprise commitment and performance of host country personnel. Training is left as generic, while it is broken down for us, while "inputs" are divided into their design and delivery, and then further divided by type, adding up to seven different categories. Inputs with the Popper scheme are left in that initial division of design and delivery. The various technical assistance and financial help which form the subdivisions among the inputs are treated as parts of other categories, namely contracting and scheduling/budget. This results, for Popper, in a more stringent focus on the component part: the major difference is the treatment of training, which is considered part of implementation for Barnett & Engel, and part of institution-building for Popper. J

Barnett adds several linkages to the host country's commitment and performance, moving it towards the actual sustainability through indigenization, and situating within the legal context of the host country. Judging from his examples, this last refers especially to its personnel policies which permit/recognize training programs and ensure placement. This generally falls under failed assumptions for us, since the most beneficial policy (beneficial, that is, to the project's interests) is usually presupposed to exist.

Program delivery is partly covered in the facesheet data on contractors, and partly through nos. 23-25, which generally lists the achievements (or lack thereof) among the parties involved for the TRITON findings, so it is not part of the categorization except where it specifically affects the contractors.

Barnett and Engel also narrow the type of project, and the problems they encounter, based upon their actual provenance/composition. Specifics of the project's locations or composition were subsumed for the Popper scheme under the various categories themselves, and were accessed by cross-tabulations with the bureau or technical code variables.

TABLE XV

FINSTERBUSCH CATEGORIES

1. good attainment
2. overall benefit/cost assessment scale
3. region
4. completion date
5. realism
6. project output
7. production increase
8. social benefits
9. sustainability
10. multiplier effects
11. benefits for poor
12. relative benefits for poor
13. private sector development
14. social costs
15. effects on women
16. problems fitting context
17. compatibility to local values
18. future utilization
19. public participation
20. understanding and coordination among agencies
21. understanding and coordination between agencies and the public
22. quality of design
23. quality of implementation
24. schedule
25. problems
26. part of a continuous program
27. participation by beneficiaries
28. host country commitment
29. host country policies' compatibility
30. market factors
31. timing and coordination problems
32. traditional customs
33. maintenance
34. decentralization
35. adequacy of financing
36. incentives + motivation
37. causes within project control
38. host country development level (per capita income)
39. total cost of project
40. AID contribution
41. adequacy of data base

BARNETT AND ENGEL CATEGORIES

1. Program planning factors
 - a. pre-design studies
 - b. overall design guidelines
 - c. realistic time frames
 - d. lines of authority
 - e. clarifying project roles
2. Host country factors
 - a. commitment of the host government
 - b. host country counterpart agency
 - c. host country personnel
 - d. host country bureaucratic process
3. Project inputs
 - a. financial inputs
 - b. commodity inputs
 - c. personnel inputs
4. Training, including participant training
5. The target institution
 - a. management
 - b. personnel retention
 - c. indigenization
 - d. local status and local laws
6. Special situations
 - a. private entities
 - b. projects with construction elements
 - c. isolated project sites
 - d. study-oriented projects
7. Program delivery
 - a. implementation by AID
 - b. implementation by the contractor
 - c. implementation by the target institution
 - d. implementation by the host government
8. Delivery of inputs
 - a. commodity inputs
 - b. financial inputs
 - c. local logistical support
 - d. personnel inputs

POPPER CATEGORIES

Design

11. Overly ambitious objectives
12. Conflicting objectives
13. Failed assumptions
14. Missing inputs and outputs
15. Scheduling and budget
16. Recommendations and planned changes

Implementation

21. Problems finding U.S. contractors and personnel
22. Problems finding host country contractors and personnel
23. Commitment and performance of U.S. contractors and personnel
24. Commitment and performance of host country contractors, government, and personnel
25. Commitment and performance of both U.S. and host country contractors and personnel
31. AID reporting requirements
32. Contracting and funding procedures
33. Coordination between AID and host countries
34. Procurement of commodities
35. Delay litanies
36. Coordination between AID and contractor

Institution-Building

41. Progress in institution-building at the Central Level
42. Progress in institution-building: Decentralization
43. Progress in institution-building: Community level
44. Progress in institution-building: Training
51. Problems with: Self-sufficiency and recurring costs
52. Problems with: Strategies and structures
53. Problems with: Training problems

Data Base

61. Data collection and analysis
62. Plans
63. Disseminating information

Impact

71. Production impact
72. Economic impact
73. Social impact
74. Spread/imitation effects

Most of the categories under data base are part of the recommendations in Finsterbusch's plea for better data initially so as to plan the project more intelligently. There is very little reference to such plans in the evaluations, especially in terms of comparative studies of before and after.



The three evaluation schemes form subsets of each other's universe: i.e.,

(Finsterbusch)	Impact Evaluations
(Popper)	All 82 and Impact Evaluations
(Barnett)	All evaluations/audits from 1974 to present

Their purposes are, however, very different. Finsterbusch's scheme is a part of a process reviewing and summarizing the Impact Evaluations: (1) to provide a rough idea of the characteristics of the evaluations; (2) to analyze the relationships between various project characteristics and project effectiveness; and (3) to develop a methodology for analyzing, comparing and interpreting the PIE reports. While Finsterbusch's categorization scheme is strongly linked to the findings' analysis, as his purpose analogous to TRITON's, with the additional exception that TRITON is geared towards building a better evaluation first, rather than the design. The findings analysis is primarily a descriptive, rather than prescriptive, tool.

The Barnett/Engel categorization is also focused strongly on the design aspect of projects and provides a checklist for when to correct when something occurs, based upon an extensive survey through D.I.U. Evaluation Abstracts. Those abstracts serve as the reference for the TRITON analyses--but were not separately analyzed. In their place were the actual evaluations, measured with a statistical tool and also a more qualitative analysis of the various findings derived from them.

The Popper categories were derived inductively by reading through piles and piles of findings, rather than based on what we expected to find from the evaluations themselves.

definition?
/// ✓

Participation is never explicitly treated in the Popper categories, being more usually subsumed under the categories of contractor performance or failed assumptions. In the Finsterbusch scheme, it occurs twice.

Host country performance is relatively analogous among all three, although there is no distinction between the various agencies mentioned as to on what shoulders responsibility for the participation is being borne.

Six of Finsterbusch's categories are treated by this contract as part of the facesheet data: this was also true for the Barnett & Engel set. They have no contact at all with the Popper categories, which were based solely on the findings drawn from the evaluation reports. Finsterbusch has, essentially, combined both of TRITON's tasks, but has done so with a different purpose and a very different universe of cases. He uses merely the impact evaluations, which, judging from the ones we've read, also stress more of the impact and overall "fit" of the project. Most of the TRITON findings never glance up from their micro-developmental perspective to view the macro concept, except where it has had a negative effect on some aspect of the project.

||| ✓

Finsterbusch's recommendations, however, echo many of our overall contractor findings, specifically on commitment of personnel and good understanding within the agencies and the target groups involved. Our findings of these stressed their negative side and its impact on the overall project: surely more attention to those areas would have resulted in significantly fewer difficulties in implementation.

|||
also
Hermann
and
DAC.

Despite the dissimilarities in purpose, it would appear that the TRITON/Popper scheme provides the same basic information as the other two, although again, due to the nature of the FY 82 evaluation universe, the categories derived inductively reflect the concentration on problems of design and implementation. There is obviously a body of data gathered with regards to all facets of the project and evaluation processes: what remains is for that body of information to become part of AID's institutional memory, and to serve as a learning experience for projects' design and evaluation so as not to re-invent the wheel continuously.

PART VII

The Findings themselves warrant further definition and elaboration in terms of how they were categorized and what types of comments might be found in each of the 31 categories.

We have already described the major headings, and lists of all of the individual categories have been presented, but it remains to explicate thoroughly how these were devised, what they entail and, in the next section, what recommendations need to be implemented in the FY83 Findings Compendium in order to provide the types of specific tests impossible to perform with the existing data.

These categories were built inductively, that is, the mass of data already existed, and a structure was elaborated from the concentrations evident from reading through all of the findings. These follow the various facets of a project fairly closely: design, implementation, institution-building, data and impact. When the individual categories were developed, a

conscious decision was made to make them as neutral as possible: that is, the categories contain findings that reflect both the positive and negative aspects of the category. For example, even a category as value-loaded as failed assumptions contains some findings that came as a pleasant surprise to the evaluators, as well as (the majority, unhappily) which involved a reason why some part of the project went awry. This type of categorization scheme also makes it impossible to state in a systematic fashion which categories are found in a lower scoring evaluation, and which are part of a higher scoring one. The only findings without such ambivalence would be in the institution-building section which is divided into two subheadings: progress and problems, while recommendations/planned changes provides suggested remedies for what has already gone wrong with a project in order for it to achieve its objectives.

The format used for examining the findings will be a brief description of the findings category, followed by a selection of findings from the various bureaus which illustrate that category.

DESIGN

Overly ambitious objectives. This category occurs in the design phase of the project, although, naturally, it makes a decided impact on project implementation if not remedied while still in that stage. This can be described as an indication of attributing an unrealistic amount of importance to one particular facet of the project, usually underestimating management's capability of dealing with that aspect.

- o Overly ambitious project design attempted to effect major institutional change in the entire host country agricultural sector through the implementation of one AID-funded project: the expectations were too broad, the time frame too short and project success depended upon uncontrollable external factors. 2630041
- o Implementation of subprojects has proceeded well although overly ambitious project planning overestimated the number of subprojects that could be achieved during the life of the project. 2790044
- o Project outputs (trained staff, agri-businesses established, grantee-GOI technical relationship established) has not been achieved due to poor project design so that project goals were overly ambitious and subprojects were not defined in practical terms. 498025105
- o Overly ambitious project design did not provide adequate time or technical assistance to district planning councils to enable them to develop and submit district level plans to central government planning authority:

obstacles included an inadequate data base, limited capability of district staff and uncooperative central ministries. 6150162

- o Project planning was overly ambitious: a contract which specifies the number and categories of people to be trained is too inflexible for effective implementation in Asia, where coordination with many other donors is necessary. 9320644

Conflicting Objectives. This occurs when the project does not clearly define exactly what it wants to accomplish, or, for example, when its objectives are so broad that there is no way to manage one aspect of the project without negatively impacting on another, usually with regards to areas of responsibility or authority. This is chronic when there has been as little attention to local systems as appears to be endemic to projects.

- o Implementation infrastructure project often cuts across subnational units, thereby requiring planning and technical assistance from national levels and undercurrent local initiative. 2630103
- o The unclear statement of goals resulted in the design of a project which had uncoordinated and diverse components. 2630101
- o The project did not achieve increased institutional capacity to respond to immediate pest infestations due to an institutional emphasis on cash, as opposed to food, crops. 625092803
- o The project's achievement of intended outputs is seriously hampered by faulty project planning which failed to link specific project plans and project activities with the project's goals and purposes, thereby fragmenting project implementation responsibility so as to preclude effective management. 6980427

Failed Assumptions. This was one of the four largest categories, which, of itself, leads to some unfavorable conclusions about the people who design projects, since fully half of all findings dealt with an ignorance of the host country and its institutions. Half, also, of course, referred to matters outside AID's control: weather conditions, political and economic changes. Failed assumptions generally involved the shattering of something which had been taken for granted at the start of the project, and which almost always had a negative impact on the project.

- o The high level of outputs achieved is the direct result of more local participation than originally anticipated. 2780228

- o Only a fraction of U.S. based and third country training occurred and no in-country non-formal training was initiated due to faulty project design which did not account for difficulty in releasing institution staff for even relatively short training periods. 2790028
- o Certain key project assumptions proved faulty including favorable environmental conditions, favorable economic conditions at the national level, high adoption of improved agricultural methods by farmers and favorable crop prices. 4930280
- o Although generally a success PL480 Title III is very vulnerable at this time due to economic and political instability. The project has been badly damaged by the cutoff of U.S. wheat shipments (to protest the Bareia Meza regime), by two currency devaluations (loss totalling US \$10 million) and by a domestic inflation rate of 60-90% annually which has ravaged future budgets. 5110522
- o Project design assumed that women would receive loans for income generating activities: women did not receive loans because project managers did not focus attention on this component of project implementation. 6860212

Missing Inputs and Outputs. This also occurred when not enough thought had gone into the day-to-day needs of a project, when the necessary logical steps had not been developed, and thus, critical things were omitted. It generally resulted in delaying the project while a makeshift replacement could be developed, or, in some cases, in seriously affecting the motivation and purpose for the project.

- o A faulty project design did not spell out an implementation methodology, causing U.S. contractor to develop a methodology by trial and error. 2790052
- o Credit provided for upgrading and construction of fish ponds is insufficient, leaving producers with a high financial risk. 4970236
- o Criteria for participation need to be well-defined and reasonable, while clinic personnel need adequate orientation and supervision (in turn requiring personnel, transportation and other resources). An adequate logistical system for moving, storing and distributing food and for record keeping must also be in place. 5040073
- o Rural production levels have not been achieved due to lack of appropriate equipment and supplies and lack of market research resulting in initial production of unsuitable products. 6320209

- o Project impact is hindered by faulty project planning which does not allow technical contractor to conduct follow-up of project activities at the mission level or to participate in activity evaluations: no data base is, therefore, developed from which the lessons learned could be disseminated. 6980407

Scheduling and Budget. This is the most formalistic of the design categories, since it pertains directly to a responsibility of the managing unit which does not rely on host country variables: if the contractor was doing something stateside, s/he would still have to provide that type of data. It is missing, or, rather, faulty, though, because of a variety of factors, ranging from the pipeline to simply thinking that subprojects would be done without any hitches whatsoever.

- o Faulty project design terminates project funding at the very stage when funding support and institutional development is most needed. 2630136
- o Inadequate project planning did not allow sufficient time for project implementation and has caused difficulties in recruiting personnel for training in third countries. 4970314
- o Overall progress toward the achievement of project outputs, purpose and goal has been satisfactory with approximately 50% of the project time elapsed at time of evaluation, 17 of 27 project objectives listed at output level have been met, while the remaining 10 were either well on their way to being completed or had been identified as being unnecessary for achievement of project purpose. 5150162
- o Problems with the pipeline are due to the year's justified delay in starting the project so to begin when the government had finished reshuffling its bureaus. 698066201
- o Faulty project planning led to dependency on output from another AID contractor before some project outputs could be achieved, which in turn led to poor timing of project implementation and hindered substantive quality of some workshops and conferences. 9320648

Recommendations and Planned Changes. This category differs from the others in that it doesn't just state something going wrong or right, but rather offers suggestions on remedying the problems or else relates what has been decided to correct the shortcomings in the project design. The fact that this is one of the four most common findings is something of an encouragement--despite all the endless complaints about contractors or

the other difficulties, once the managers are aware of problems, steps are taken to rectify them, or, when it doesn't look as though anything will help, to recommend that the project be terminated. Many of the recommendations are couched in language which implies that if the recommendations are not carried out, the project will surely fail: one wonders just what percentage of the recommendations are eventually implemented.

- o While the U.S. component of the training has been basically satisfactory, greater concentration should be directed towards the creation of an Egyptian faculty. 2630021.
- o Establishment of a design unit at the state level would expedite the project and approval process for the medium irrigation subprojects. 380467
- o Administration of the training component should include closer integration of training with national priorities, a mechanism to identify fields of specialization, candidate selection criteria and the development of a mechanism to ensure that returned trainees are utilized in agricultural sector programs. 5110481
- o Host government community development objectives would be better served by a selective rather than blanket coverage approach to extending community development activities. 6310017
- o The project has been recommended for a five-year extension due to the continual requests by host countries for technical assistance in survey planning and implementation. 9311064
- o More care has to be taken to define the beneficiary population more precisely: it will have to determine in what type of lending the organization is most needed and has a comparative advantage in, especially in terms of the service it can offer, given its limited resources. 9380131

IMPLEMENTATION

Contractors and Personnel.

Problems Finding U.S. Contractors and Personnel. Before one can implement a project, the staff requisite for the tasks involved have to be found. It is often a long process, due to lack of language skills, or the level and type of skills needed. This was true for U.S. or third country contractors, while other problems presented themselves to host country contractors.

- o Project implementation has been delayed by the inability of the technical assistance contractor to recruit sufficient personnel with the required language skills. 2760019
- o There were numerous problems in the implementation of this project, many of which stemmed from the fact that Catholic Relief Services (CRS) did not follow the Ministry of Health guidelines in recruiting trainees. 2790065
- o Project implementation delays were caused by the inability of the USAID mission to recruit long-term technical assistance personnel. 4970314
- o The long-term technician did not arrive until one year after implementation started, resulting in project delays and an extension of the project. 6830224

Problems Finding Host Country Contractors and Personnel.

The types of problems range from finding qualified personnel in the first place, since the pool of skilled labor is usually tiny, to the personnel who are qualified not being released, or only grudgingly, from their government positions. While a language problem is not specifically mentioned, in many of the larger countries a government official would probably not know the dialects of many of the beneficiaries.

- o Computerized processing of data cannot be achieved until host government provides a computer trainee to undergo appropriate third country training. 2760020
- o Problems include selection and recruitment of Panchayat-based workers, especially ones who are both female and fully competent literates. 3679001
- o Primary hindrance to project implementation is the lack of adequately trained personnel: several subproject implementors lack administrative and technical background, as well as the necessary leadership skills to carry out project activities. 5220150
- o Recruitment of local counterparts is slow and is acting as an implementational constraint. 6330077

Commitment and Performance of U.S. Contractors and Personnel. This together with that of host country contractors, makes up the last of the four most common categories. While the overall distribution in terms of design and implementation is logical, the concentration on the contractor problems would seem to indicate specific managerial problems on the part of the (usually) missions in charge of these projects. It is, of course, easy to throw stones--but that is not the intent of

this study, which is to hypothesize why the distributions turned out as they did. Another hypothesis is that the contractors evidence a wide variety of performances, but most of the negative comments stem from not using a collaborative style of management with either the AID mission or the host country; one of the more horrific findings was one in which the contractors, after having delayed for months while housing to their liking was built and then rebuilt in a site deemed more suitable, never talked at all to their counterparts. One wonders what type of filtering process is in operation. While more of the contractor comments were negative than otherwise, there were at least a third which indicated exceptional performance. This was categorized basically if fault or praise could be directed at one of the contractors, and problems of coordination were dealt with in another category. These next two categories dealt with primary responsibility.

- o Major problems thus far appear to be poor backstopping by Purdue University as evidenced by poor identification of adequate and appropriate advisors in a timely fashion, and poor inter-agency cooperation and communications that would support improved decentralization. 150000101
- o Strengths of the project are its purpose, which developing countries find attractive and are enthusiastic about, its client and results-oriented design which fosters partial results and its excellent reputation which promotes acceptance of the project and attracts capable staff. 4980265
- o The systems approach led to the design of a complicated program which was difficult to manage. 5220265
- o CRS, furthermore, was not biased in its distribution of food, i.e., preferring Catholics as beneficiaries, as some have claimed. 6414801
- o Although the PVO's demonstrate unusual cultural sensitivity, they do need to systematize their training programs, as well as their evaluation techniques. 8000001
- o The achievement of project outputs is hampered by the difficulty in coordinating the various project committees and by the large number of members of those committees. 9311328
- o CODEL has done a commendable job of making progress in collaboration with other PVO's, not only is there collaboration across organizational and national lines, but across religious boundaries as well. 9320113

Commitment and Performance of Host Country Contractors, Government and Personnel. This category focused on the willingness and the beginnings of national capacities on the parts of the host country governments to expend their own manpower: while many of the findings reflect negative impacts--lacks of coordination or personnel or near total disinterest, there are more than a few glimmerings of the realization of cooperation as the most effective means to achieve an end.

- o Project has been successful in mobilizing host country scientists to participate in project activities, including training ones. 2630041
- o The lack of coordination between the government's Departments of Agriculture and Irrigation has resulted in the delay of implementing agricultural development plans and setting up demonstration plots, thus negatively impacting on project implementation. 3860464
- o The Haitian Development Foundation is making progress towards the achievement of the long-range goal of economic development through demonstrated impact on the targeted community loans, membership, amount of technical assistance received and generally the number of clients, which has increased. 5210118
- o Project experienced lower than expected demand for credit due to restrictive lending policies, inherently low demand from subsistence agriculture sector and to credit union's failure to expand its small farmer production credit groups. 6320214
- o Furthermore, bureaucratic conflict has created an atmosphere which much research done at the center is rejected out of hand by the central Ministry of Agriculture and often has to be redone to be acceptable. 7005034
- o Through effective collaboration with UN agencies, there has been substantial support in promoting surveillance and developing appropriate methodologies. 9311064
- o The impact of leadership training is limited due to lack of adequate resources and technical support from host government. 9380202

Commitment and Performance/Coordination of Both Host Country and U.S. Contractor, Personnel and Government. This category was derived after the other single-fault categories were deemed to narrow to focus on the problems that beset any project in which--as happened--more than one contractor is involved. There is no scapegoat--except of the process as a whole.

- o Project implementation delayed by lack of cooperation between U.S. contractor and host government, resulting in lack of inputs to the local level, delays in procuring some commodities and delays in site selection for some subproject activities. 2780228
- o Free distribution of weaning food through Ministry of Health clinics is not yet underway. The lack of a resolution regarding a payment dispute between implementing agriculture agency and Ministry of Health is cited as a major reason for delay. 5040073
- o Strong cooperative efforts and coordination were displayed in the rural water supply project between the government implementing agency, the local village water supply system, AID's project technical assistance team and a development team from Switzerland working on similar projects in the areas. 6320088
- o Carefully planned efforts to secure the involvement and commitment of community residents contributed to the success of rural water/health projects in Panama. 7005032
- o The recipient organization's support for family planning programs is shaped by host country policies, resulting in the provision of considerable assistance for health activities unrelated to family planning. The health-oriented mandates of the recipient organization's principal executing agencies also contribute to this mix of activities. 9320662

Procedures and Bureaucracy

AID Reporting Requirements. The majority of findings in this category stressed the need to simplify these reporting requirements, but, at the same time, to refine the tools so that it would be clear to the contractors what their responsibilities were and when those documents were to be delivered. This would result in AID's ability to monitor the project in terms of sheer paperwork requirements, and the reduction of those at the same time might result in more on-site monitoring to prevent abuses of the projects.

- o Project success could be increased by simplification of AID's host country reporting requirements. 3860455
- o USAID monitoring of the project was judged to be "marginal-to-poor" which resulted in a number of abuses of the project intent in order to further someone's political ambitions. 6690122

- o Project evaluation activities required by AID are burdensome and unnecessary and require time needed for project activities. Greater use should be made of other available project reviews and evaluations. 9311328

Contracting and Funding Procedures. This category again reflects the paperwork burden imposed by--and on--AID. There are some innovations in the types of funding, not all successful, and some projects seem to make up their own procedures for contracting, also with varying degrees of success. Many of the less successful ones delayed or hindered the overall implementation of the projects, but they are nonetheless interesting for signalling a willingness to innovate in what has been a problem for AID for some time.

- o An inappropriate funding mechanism required AID mission to approve expenditures which it had no say in authorizing. 2630041
- o Large initial expenditures require AID to adopt an advance payment system instead of a reimbursement system due to host government lack of capital and the need for construction funds to be available in a timely manner. 4980119
- o Additionally AID/Washington was instructed to reduce support to government following the coup, resulting in technical assistance constraints and delays. 5110468
- o One major delay was attributable to Office of Contract Management who insisted that technical assistance procurement be set aside for small business concerns. Delay should not significantly affect project's outcome. 6320088
- o The project's use of a selection committee for sub-grant proposals has been successful in ensuring scientific quality of proposals, in increasing the likelihood of its contribution to developing country problems, in achieving cost-effectiveness and in drawing on a broad base of scientific expertise that would not otherwise have been available. 9310610
- o Delayed funding from its principal founder caused contractors delays in hiring of critical personnel and firing other. Delayed funding has been a psychological deterrent. 9380184

Coordination Between AID and Host Country. This category harks back to the one on reporting procedures, as well as highlighting both the high staff turnover at AID which makes coordination--and certainly continuity--very difficult, and the lack of language ability among that staff. Many of the

findings in this category, however, are positive: more tasks were accomplished due to good coordination. It is, as are many of the categories, fairly evenly distributed over the positive and negative effects.

- o Local implementing units have not received timely communications from AID mission and host country implementing organization regarding policy guidelines and procedures; local selection of which project activities to pursue has been unnecessarily limited. 2630103
- o Lack of communication between grantee and mission such that identified problems were not addressed by the mission. 498025105
- o The fact that the project was completed in this period was due to the close cooperation between the Directorate de Caminos in Honduras and USAID. 522013302
- o High USAID staff turnover has led to poor communication with the various GIRM officials 6820201
- o AID and recipient organization have established working relationships that represent generally effective program coordination. Certain organizational differences have produced communication gaps which can and should be overcome. 9320662

Procurement of Commodities. Naturally, one cannot start a project without the basic inputs: this category is basically a litany of complaints, whether about AID's policies, or problems with host country procedures, or the actual mechanics of getting the commodity from the warehouses to the targeted sites.

- o Delays in procurement of one commodity from public sector supplier required for successful completion of a majority of subproject activities is delaying overall implementation. 2630103
- o Although inputs have been received by both parties, procurement was delayed by AID policy so that the project may have to be extended to reach targeted objectives. 3860462
- o Management of vocational skills training project did not fully understand USAID's procedure for ordering equipment from overseas, resulting in procurement delays of tools and equipment of up to nine months. 5320070
- o Host country supply arrangements require craftspeople to order and pay for supplies a year prior to delivery--an impossible condition for small craft operations; and

host country laws and distribution system make natural mohair colors difficult to obtain. 6320211

Delay Litanies. This category was derived when it was apparent that some findings--unless one dissected them by clauses--were just a long string of all the things that could go wrong with a project. These ranged from commodity problems through host government constraints, to financial reasons within the mission, or to sheer logistical constraints in transporting the materials to sites which had previously been considered inaccessible for very good reasons.

- o Lack of timely communications between AID/Washington and the field have hindered project implementation; project uses a collaborative assistance form of contracting in which AID/Washington administers contract and arranges for technical assistance personnel while a U.S. contractor has responsibility for implementation. Communication problems also exacerbated by assignment of key AID/Washington personnel to other field assignments. 2790052
- o Project implementation delayed due to 1) difficulty in delivery of bridge components to inaccessible areas due to unavailability of air transport; 2) difficulty in getting transport funds to host government and then to project account for final release to field staff due to shortage of accounting staff. 4980119
- o Although resolved, the project encountered difficulty when vehicles were delivered late and per diem figures were not included in the budget, thus hampering the number of trips to rural areas. 5260510
- o Poor project planning delayed and threatened project results due to delays in financial disbursements, inadequate coordination between AID, FOA, USDA and host government, location of project facilities away from field sites, and delays in recruitment and training of personnel. 6150180
- o Declining budgets, loss of coordinating authority, frequent institutional redefinition and loss of status and professional autonomy have combined with previously mentioned factors to undermine project success. 9005034
- o Project management hampered by: need to coordinate three different project contractors and to gain consensus on goals, procedures and methods; change of principal research personnel at two research institutions with consequent loss of important momentum; project objectives too broadly stated; and lack of adequate reporting procedures. 9310594

Coordination Between AID and Contractor. This category was added when the gap between the contractor problems and some of the areas of coordination was recognized. This was designed to focus on the need for more and better coordination between AID and the implementing organizations, which often seemed to be trying actively to circumvent the other.

- o Project delays caused by lack of agreement on project goals between AID and the implementing organization. 2630015
- o Institution-building component of project hindered by AID/Mission reduction of project budget at mid-term such that U.S. contractor lost the only long-term technical assistant position with institutional contacts, thereafter, limited the technical assistance to short-term visits by U.S. contractor and the provision of library materials to host government. 664023701
- o The effectiveness of project implementation has been reduced due to a verbal direction to the contractor from AID/Washington to disregard certain aspects of their contractual scope of work (i.e., training needs assessment) that proved to be necessary to achieve effective implementation. 9320644

INSTITUTION-BUILDING

Progress

Progress at the Central Level. This category assesses the changes made--usually attributed to the project--in the host government abilities at the national level. All of the findings in this part and through the next three reflect positive improvements made at some level of the project.

- o Project implementation has been successful in achieving outputs including trained personnel, health facilities constructed and institutional materials developed. 2760019
- o Although creation of regional planning apparatus was not achieved, project succeeded in laying groundwork for planning apparatus in one of four provinces, in creating model for other provinces, and in identifying roadblocks to regional planning concepts. 4970246
- o Project implementation has generally been successful in achieving intended project outputs; priority areas for followup activities have been identified in most cases. 6550003

- o Impact of Bicol progress to date has been limited, though not unpromising. Time spent thus far has been in laying the groundwork, designing projects, raising resources and initiating project implementation. Staff and infrastructure are in place. 7005028.
- o The survey and surveillance project has accomplished its immediate objective by providing technical assistance to 13 countries in developing capabilities to address nutritional problems. 93311064
- o Funding of technical assistance evaluations and provision of other services, e.g., health insurance, provides "glue" that holds consortium together. 9380030

Progress with Decentralization. This category was interpreted as incorporating some of the extension elements into a sub-national level, although not yet at the community level. It stresses the outreach aspects of programs.

- o The sub-national units with the most decentralized responsibility have the highest activity completion rates; majority of implementation problems are occurring at national rather than local level indicating that decentralization is appropriate in host country, i.e., principal assumption that decentralization promotes development is holding true. 2630103
- o Project transferred from the control of the central bank to the Ministry of Agriculture to be more in line with the grassroots approach of the project. 5150158
- o Original project targets in inland fisheries extension project were met. Progress was made towards forming a trained group of counterparts that would be capable of continuing the project. 69804712
- o On the positive side of food grain research project was the impressive establishment of a functioning, decentralized but coordinated research system.
- o LRR/ARO is an effective, useful instrument to: 1) promote exchange among agencies and communities; 2) facilitate training workshops and seminars; and 3) support small, hard-to-finance projects, but that its purposes are not fully appreciated by all the agencies supported by LWR. 938013202

Progress at the Community Level. This category simply continues the progression, to smaller units, this time focusing on efforts at the community level.

- o The most intriguing accomplishment of the program is the spirit of community development that has occurred as a result of the involvement of community members. A working together attitude quite contrary from the individualism of the Lebanese society has been fostered. 2680318
- o Community development, credit, extension and training and land acquisition programs have been set up and are beginning to function. 3830025
- o Local administration has been successful in promoting the use of local materials by loan recipients, increased use of self-help construction methods, local savings and loan technical assistance and adaptation/application of the cost/design methodology thus enabling beneficiaries to fully utilize their loans. 5110005
- o That the program was effectively changing the farmers' attitudes was evident in the interest they exhibited in the demonstrations and training, the enthusiasm for the new approach, and their intention to apply what they learned. 621011901
- o Most successful component of water health services project was the installation of gravity water supplies: they require no fuel or energy to operate and are most appropriate where hydrologic conditions permit. Such systems are the simplest and cheapest to built, operate and maintain. 7005024
- o Councils have produced development plans and have initiated development activities in many sectors. 9380202

Progress with Training. Naturally, one of the vital components of institution-building is teaching people how to do something they did not know how to accomplish previously.

- o Training of host country vocational training administrators has been successfully accomplished through short-term participation training in the U.S. 2780238
- o Indonesian agriculture education for development project is successful in training Indonesian graduate students in U.S. universities. These returned participants are making significant contributions to university teaching and administration. 4970260
- o Rural leadership training center project a success. Multi-purpose community center built and operating, non-formal education training program established and appears to be appropriate to rural dweller's needs. 5220147

- o Project implementation has been successful in training host country rural cadre that is now acting as a focal point for small enterprise development activities. 6330077
- o The immediate impact was to improve the qualifications of in-service teachers. 7005037
- o U.S. contractor has been successful in achieving project outputs including trained LDC agriculturists; trained agriculture researchers have been full participants in the applied research process and their progress has been followed by U.S. contractors after their return to their home countries. 9310621
- o Matching grants to U.S. voluntary organizations have been successful in providing leadership training to scholars and leaders from community councils. 9380202

Problems

This next section reflects all the things that can go wrong with institution-building, from self-sufficiency through training. This results in a counterbalance to the successes described on the last few pages, but initially was set up in this fashion because it was easier to visualize the broad categories of progress versus problems, with the basic types of each derived from examining the whole.

Problems with Self-Sufficiency and Recurrent Costs. This category marks one of the major problems with any project: how do you give it sufficient money in the beginning and channel it so that it generates enough to sustain the project without endless renewals.

- o Institutional development goals of project may not be met due to a lack of institutional infrastructure in target host country institution that would permit continuation of institutional leadership and purpose. 2630136
- o Haitian Development Foundation is suffering from an operating deficit caused primarily by poor performance in fund raising. Foreign fund raising activities have been successful but the local fund raising situation is not satisfactory. The amount of local contributions is too low and as that stems from payment of membership dues, the HDF must emphasize membership drive. 5210118
- o Food for work commodities appear to substitute for purchased food rather than for food production. 6324801

- o This system functioning well in education, however, the current program is in great demand by the rural population and is only marginally adequate to sustain present levels of activity and needs more budgetary support to remain viable. 7005025
- o The level of funding for future years may be a potential problem due to the increase in the number of activities under the program. Alternative strategies are being initiated for "add on" funds to carry out activities under the program. 931004514
- o Implementing organization has not adequately considered the institutional development requirements of health and other service systems by failing to institute technically adequate and sustainable community services. 9380202

Problems with Strategies and Structures. This category deals with the difficulties encountered from using a particular technique which was ineffective in that cultural setting, or due to cooptation of trained personnel from their proposed job to another area of the country's needs.

- o Project impact in terms of institutional development will be hindered because returning trainees will not be utilized as medical instructors but rather as tutors. 2760019
- o Some problems noted in marketing and marketing research infrastructure in Nepal especially in hard to get to areas. Private sector national distribution system and local advertising industries are especially lacking. 3679002
- o In borrowers' view, access to credit under productive credit guaranty program has meant definite improvements in production and sales, however, numerous shortcomings and obstacles in loan application and disbursement were mentioned. These resulted in significant delays of investment start up and ultimately restricted the number of potential borrowers who could be reached by the program. 5110486
- o Rural roads construction in and of itself guarantees neither the delivery of services to rural areas nor the productive use of such roads by rural inhabitants. 6150170
- o Researchers cannot see why all technologies are not adopted and farmers cannot see how researchers can expect them to take so much risk. 7005033

- o Project implementation was continued long after it became apparent that project impact would be substantially less than the project design anticipated. 931047111
- o Urban credit program successful in reaching those to whom credit in the formal lending sector is unavailable, however, by the very nature of lending organization policies, increased productivity and employment generation have not resulted. 9380146

Training Problems. This category is diametrically opposed to the one mentioned under progress, and reflects all of the things that can go wrong with any training program, whether it involves simply not achieving a targeted output, or using a curriculum which is inappropriate for that program or method.

- o Training output of project has not been achieved. 2790028
- o Problems include training adequacy with regards to the relationship between curriculum and job description is vague, teaching aids not utilized, and there are not enough refresher courses. 3679001
- o Center's offering of only traditional women's skills training severely limits vocational opportunities for women graduates. 5180001
- o Poor project implementation quality has resulted in a program of long-term, formal third country training that has little relationship to project requirements. 6550003

DATA COLLECTION AND ANALYSIS

This subject comprised several of the internal variables for the evaluation (statistical) report, but it is interesting to note that there were proportionately very few findings under these categories, no matter how well/poorly the evaluation scored. The Office of Science and Technology is the only exception to this generalization, but sort of provides the reverse side of the coin: a concentration of findings in data collection and analysis was also no guarantee of a better or worse evaluation, merely serving as an indicator of the general subjects found within that bureau.

Data collection. This category refers to the actual dynamics of finding and assembling a body of knowledge, and then conducting an analysis of it. The category also divides fairly neatly into things that went wrong and those that did not.

- o Although a fair amount of data on other processes has been collected, there has been no systematic compilation and/or contribution of same. 2630096

- o Project has achieved stated outputs including macro (national) and micro (project) indicators of national progress toward economic and social equity, including indicators of the status of women in the development process. 4920295
- o The project has accomplished its purpose and has managed to stimulate regionwide interest in improving methods of data collection, analysis and use. 5960048
- o Technical transfer had been organized along with a reporting system. Trials recently proved that yields could be significantly increased by substitution of improved practices. 6360102
- o Institute of Agricultural Science and Technology (ICTA), doing farming systems research and extension, has made significant institutional, operational and research accomplishments. Significantly improved seed varieties and cultural practices acceptable to the small farmers were developed for maize, beans and sorghum. 7005030
- o The area frame sampling methodology can be transferred to almost any developing country, regardless of its technical base in agricultural development. 9311224
- o Inquiry and documentation service are invaluable, but some information is gender-biased and criteria are established by individual volunteers. 9380157

Plans. This category simply refers to what types of output the information has/has not been generating.

- o Training and technical assistance are being used successfully to develop and institutionalize methodologies for planning and implementing development projects. Better coordination in development planning/implementation within host country development organization is resulting. 5110471
- o Numerous plans and studies produced. Major action passing from planning to implementation.
- o An output of project-the national agricultural library's special activities-is an appropriate mechanism for planning and demonstrating the feasibility of new agricultural information and products which AID may create to meet needs of AID/Washington and field projects. 9310064

Disseminating Information. This is another category which reveals what is done/not done with the information collected. By and large the most prevalent problem, however, is getting

the relevant data out of the laboratories and into the fields where it could be of most use.

- o No methodology had been developed for researching or disseminating information on mixed farming systems to small farmers who do not have access to information on advanced farming technologies. 5960083
- o Dissemination of research results at the national level is facilitated when research and extension functions are within the same ministerial organizational structure. 6250928
- o Research and extension services have worked well together on outreach, demonstrations, field trials and popularization of the new packages of improved technologies. 7005033
- o Project efforts to diffuse S&T technological innovations have stimulated considerable interest and activity in developing countries. 9311223

IMPACT

Production Impact. This category delineates any increases in the productive capacity of the target group/crop/project that are attributable to the mechanisms in the project.

- o Investment in minor irrigation has positively contributed to an increase in agricultural production and income. There is no data for its effect on employment generation. 3860466
- o Food for Peace program does not seem to act as a disincentive against greater agricultural production or against any effort on the part of the Ghanaians towards economic development. 6414801
- o Generally, at the commercial level electricity had the greatest impact in the processing stages and less on on-farm production. 7005022

Economic Impact. This refers to any observable changes in the income or purchasing power of the targeted group, and is usually a result of some increase in production--using the methods set forth in the project or related to expressed needs by the target population--in the general area.

- o Small private businesses have sprung up on the project areas. 2780205
- o Families enrolled in the center have raised their standard of living. 5180001

- o Food aid programs are an effective method for providing additional services for rural women, many of whom have no other avenue for receiving such resources. 6324801
- o Other findings include: as income goes up, the ability to utilize rural electrification productively goes up which in turn further raises income. 7005022
- o Project activities will eventually benefit rural women as women assume major responsibility for raising small ruminant animals. 9311328
- o Some clients live from the proceeds of their businesses, others have them as additional income. 9380131

Social Impact. This category lumps all of the non-material changes like health or increased goals together. Having an impact socially is usually a positive thing: this can, however, misfire occasionally if the results of your program conflict.

- o Other benefits included intangibles like: an enhanced sense of welfare, security and health or improved aspirations for the future. 5110522
- o As a result, the project failed to accomplish its objectives as evidenced by the rise in population from 3.3% to 4% instead of a decrease. This population increase could be directly attributed to the improved medical care to mothers and children. 6150161
- o Project is meeting its objectives and has already achieved its purpose of reducing the incidence of communicable diseases among Mauritanian children below the age of six years. 625093705
- o Mobile trade training school project has had sustained effects on both the educational institutions of Thailand and on the rural population it was intended to benefit. 7005025

Spread/Imitation Effects. This category contains an excellent measure for determining project success: whenever a design is replicated, formally or informally. The informal mechanisms usually involve the spread of a type of organization/innovation from one area to another, while a more formal dynamic would be an invitation from a third country to initiate a similar project there.

- o Project stimulated formation of fish production associations in target areas. 4970236

- o The introduction of the area sample frame for these activities has been somewhat accepted and its use is having a noticeable impact on national programs. 5960048
- o An unexpected benefit of the project seems to be an attitudinal change on the part of the cooperative administration. 6320089
- o There has also been a substantial increase in the number of countries requesting assistance to develop programs. 931004514

PART VIII

RECOMMENDATIONS

There are a few things which could be done to better the findings compendium, some of which overlap the evaluation (statistical) report's suggestions.

First of all, much greater control needs to be exercised by a central authority in terms of the distribution of the evaluation reports. This would prevent untoward percentages like those generated by both Coders 2 and 3, and would make for a more reliable assessment overall of the types of findings different projects by different bureaus generate.

Second, and again this is a matter for some central authority, to monitor the types of information obtained. This would result in far less confusion over technical codes, and if that central authority served as a liaison with AID, would also provide much greater contact and act as an additional monitoring function. This same authority could also control the project numbers (which would prevent the use of three different numbering schemes for some of the Food and Voluntary Assistance), and provide a reference for the project numbers subsumed under the Impact evaluations. These tasks were made more difficult by the lack of a reliable method for recording that information.

Next, the training for just what constitutes a finding and how to present them needs to be expanded. It is obvious from the types and quantities of findings reported that there was a certain discrepancy by coders as to what they thought the exercise entailed. The findings had been defined as crisp sentences, narrating one fact or conclusion about the project, with as many findings as there were pertinent observations. This one-to-one correspondence was often overwhelmed by paragraphs of findings, all of which had to be dissected in the categorization scheme and which gave a very biased view to the average number of findings by project and by bureau.

Finally, the categorization scheme itself needs to be revised in an attempt to pinpoint where the major strengths and weaknesses lie. This will entail using subcategories to highlight positive and negative findings, to break out the recommendations category to include a separate one for implementation, as well as design, and to devise categories which delineate the coordination difficulties involved for any of the principals separately and combined. The data section could easily be subsumed under institution-building, since that is also a task for which it should be used.

AID has often been faulted for its lack of institutional memory, and, while this study clearly demonstrates that lack,

there are indications that a learning process has been initiated. There have been a number of Program Evaluation discussion Papers over the last two years, designed to synthesize some of the major results from evaluation series.

This Findings Compendium, as part of that learning process, proposes several recommendations for the amelioration of the projects themselves. These are grouped around the "recat" categories for the compendium, although specific categories within those general listings may also be addressed.

DESIGN

- o AID must either enforce social soundness analyses by their contractors before the beginning of the project, or else make the specific country situation and prior project experiences available to the contractor. There have been studies and projects done for every country in the world, there are surely ample informants available to brief a contractor, so it is simply inefficient--and, in the long run, ineffective--to neglect basic cultural and systems analyses.
- o AID must also exercise a much closer monitoring function over the design process: if, as studies indicate, AID has more of an oral than literary tradition, then a closer monitoring by personnel in the targeted countries might correct some of the more problematic areas regarding personnel and facilities available.
- o The design process needs to be made more rigorous: care taken before a project is in place to ensure a smoother implementation allows more grace time when the unexpected turns up and reduces the incidence of missing inputs and outputs or of scheduling problems.

IMPLEMENTATION

- o AID needs to clarify their reporting and funding procedures, and to provide guidance to contractors in terms of which procedures affect them when. Many of the findings indicated problems with the information system, as well as with overall coordination. This could be done in the form of a short orientation meeting whenever the contractor has been notified of the proposal's acceptance.
- o It should be made explicit to contractors that, while an authoritarian management may be the most efficient--in an ethnocentric sense of accomplishing something--it also usually results in poor coordination with one's counterparts. While that may be an implicit goal of the contractor, it is up to the AID management entity to

circumvent such a process. AID must monitor the contractor's performance more closely, not necessarily through formal, written, reports, but through the assignment of specific officers to specific projects, who then can informally visit the site and observe the functioning chains of command.

INSTITUTION-BUILDING

- o This section builds upon that last recommendation: a project's chances for sustainability are greatest if if 1) includes some facets which more than pay for themselves, and 2) if the training component is more than simply pro forma. That is, the training process must be integral to the overall implementation scheme: the purpose should be to provide that country with at least some of the necessary expertise to manage the next phases of whatever system (irrigation, etc.) has been initiated.

DATA

- o This process can not stop after the data has been collected: the bulk of the findings here were in data collection and analysis, with proportionately fewer for either plans or dissemination. Perhaps, due to the large proportion of interim projects, this area was simply not yet addressed. It is equally likely, unfortunately, that the projects were designed simply for the pursuit of knowledge and not its subsequent utilization. It's marvelous to be able to design a better mousetrap, but it doesn't do very much for the farmers concerned about grain loss if the idea and the model are kept in the laboratory.

IMPACT

- o Because there were fewer final and ex-post evaluations, there were also proportionately fewer impact findings. ~~None~~ of those findings, however, seemed to make use of the technique of rapid rural appraisal, nor to state--except infrequently--what types of indicators were used to measure impact.

The Findings Compendium stands, however, despite some operational faults, with very few other documents in that it presents a census overview and summary of the evaluations, and provides a ready reference tool for some of the major problems--or lack thereof--that project management can expect from a variety of projects in a variety of settings.

APPENDICES

- Appendix A.1-6: Simple Frequencies of External Variables
- Appendix B: Table of Coder by Categories
- Appendix C: Table of Bureau by Categories
- Appendix D: Histograms of Individual Bureau Frequencies
in the Recat Mode
- Appendix E: Histograms of Comparative Findings by
Bureau for the Recat Mode
- Appendix F: Simple Frequencies of Expanded Technical
Codes

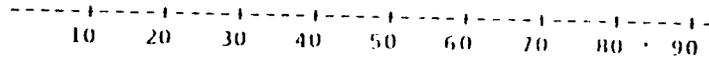
APPENDIX A.1

SIMPLE FREQUENCIES OF EXTERNAL VARIABLES

FREQUENCY BAR CHART

OF EVALUATIONS

REGEO	BUREAU	FREQUENCY
Near East	*****	40
Asia	*****	31
Latin America	*****	49
Africa	*****	92
Impact	*****	16
S & T	*****	26
FVA	*****	12



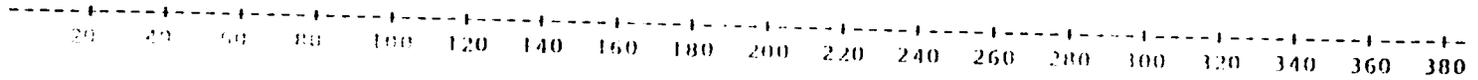
FREQUENCY

SAS

FREQUENCY BAR CHART

OF FINDINGS

BUREAU	FREQUENCY
1	219
2	124
3	191
4	383
5	70
6	113
7	38

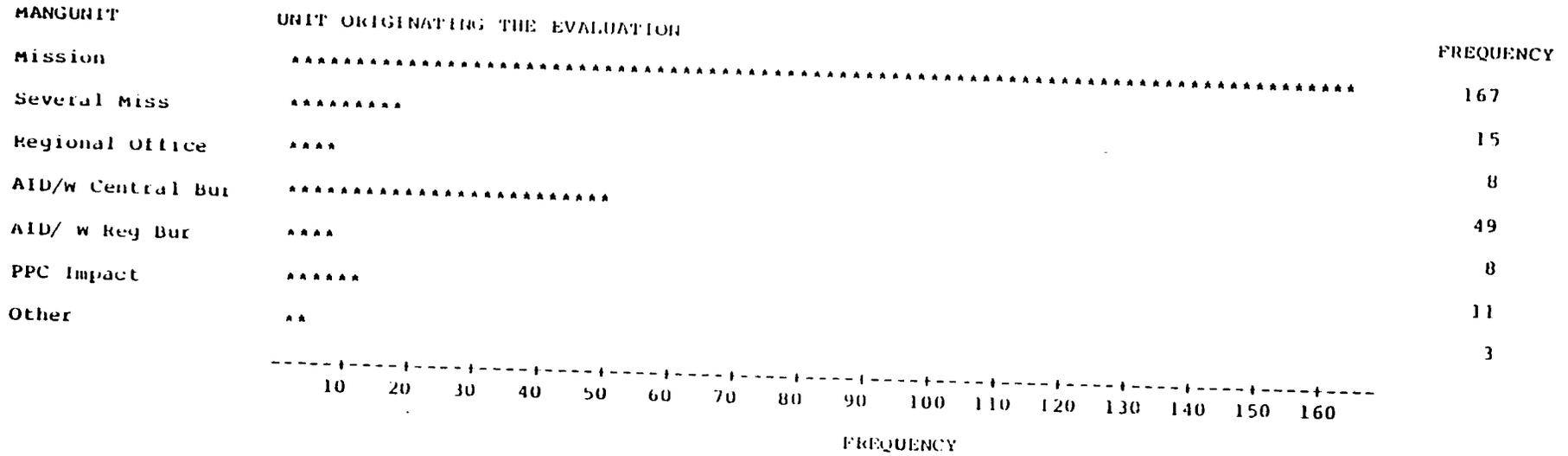


FREQUENCY

2

APPENDIX A.3

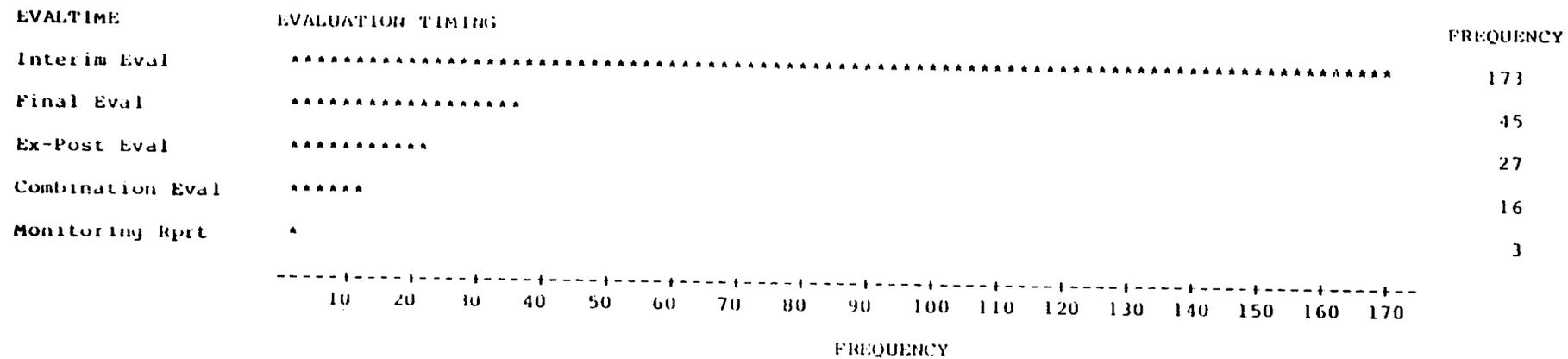
SIMPLE FREQUENCIES OF EXTERNAL VARIABLES
FREQUENCY BAR CHART



199

APPENDIX A.4

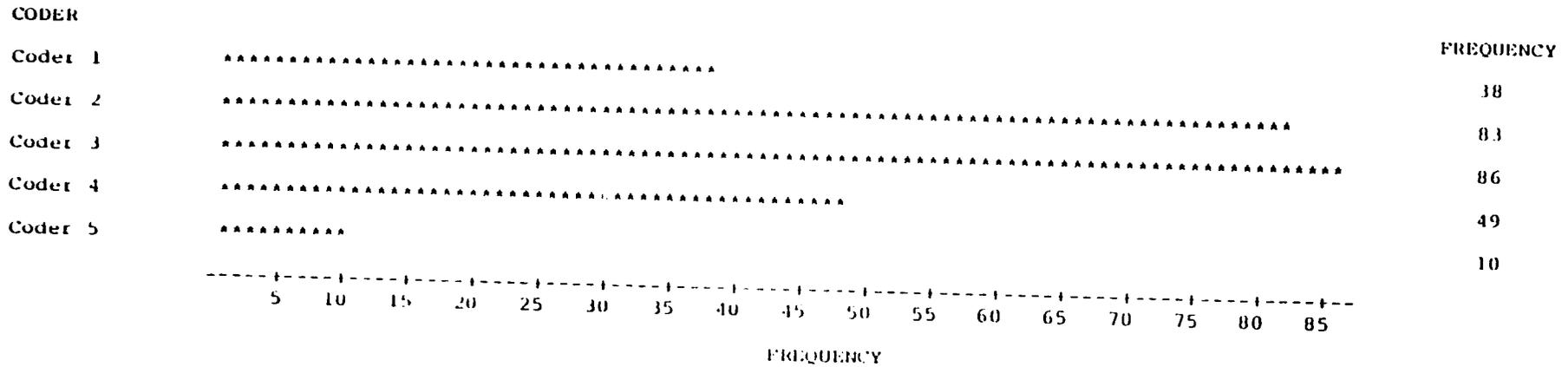
SIMPLE FREQUENCIES OF EXTERNAL VARIABLES
 FREQUENCY BAR CHART



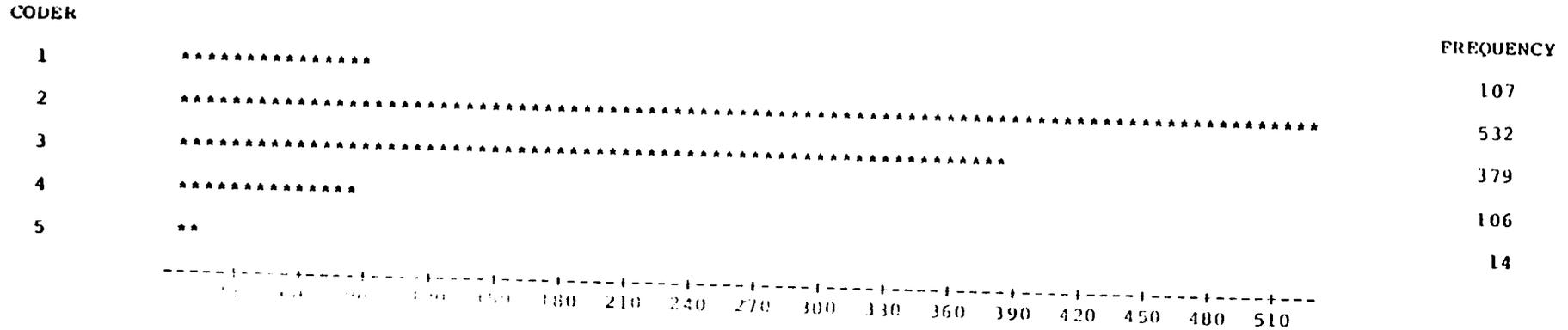
100

APPENDIX A.5

SIMPLE FREQUENCIES OF EXTERNAL VARIABLES
 FREQUENCY BAR CHART
 OF EVALUATIONS



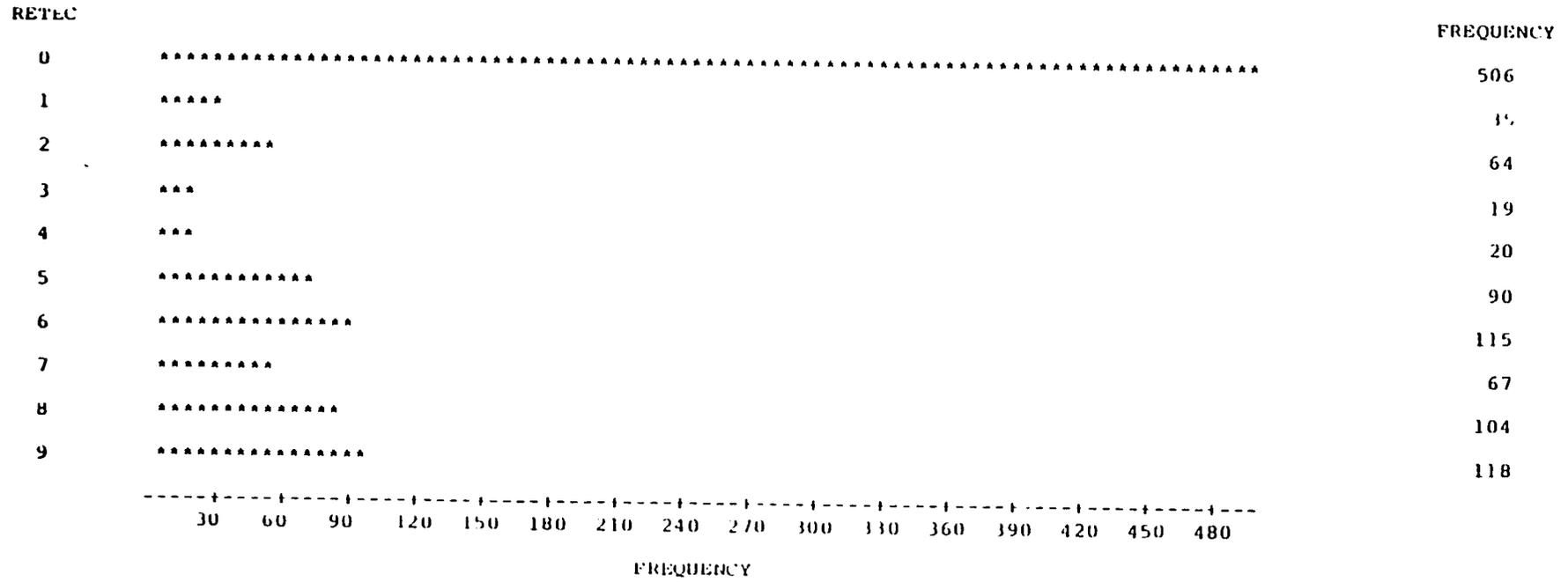
SAS
 FREQUENCY BAR CHART
 OF FINDINGS



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APPENDIX A.6

SAS
FREQUENCY BAR CHART



60

APPENDIX B

SAS

TABLE OF CODER BY CAT

Coder	Cat											Total
	11	12	13	14	15	16	21	22	23	24	25	
Coder 1	2	0	16	4	3	2	1	4	10	11	3	107
	0.18	0.00	1.41	0.35	0.26	0.18	0.09	0.35	0.88	0.97	0.26	9.40
	1.87	0.00	14.95	3.74	2.80	1.87	0.93	3.74	9.35	10.28	2.80	
	11.76	0.00	16.16	8.33	6.00	1.77	14.29	25.00	8.85	10.19	12.50	
Coder 2	14	5	40	33	21	63	6	10	52	45	7	532
	1.23	0.44	3.51	2.90	1.85	5.54	0.53	0.88	4.57	3.95	0.62	46.75
	2.63	0.94	7.52	6.20	3.95	11.84	1.13	1.88	9.77	8.46	1.32	
	82.35	45.45	40.40	68.75	42.00	55.75	85.71	62.50	46.02	41.67	29.17	
Coder 3	0	5	38	6	20	30	0	2	36	44	12	379
	0.00	0.44	3.34	0.53	1.76	2.64	0.00	0.18	3.16	3.87	1.05	33.30
	0.00	1.32	10.03	1.58	5.28	7.92	0.00	0.53	9.50	11.61	3.17	
	0.00	45.45	38.38	12.50	40.00	26.55	0.00	12.50	31.86	40.74	50.00	
Coder 4	0	1	5	5	6	17	0	0	12	8	2	106
	0.00	0.09	0.44	0.44	0.53	1.49	0.00	0.00	1.05	0.70	0.18	9.31
	0.00	0.94	4.72	4.72	5.66	16.04	0.00	0.00	11.32	7.55	1.89	
	0.00	9.09	5.05	10.42	12.00	15.04	0.00	0.00	10.62	7.41	8.33	
Coder 5	1	0	0	0	0	1	0	0	3	0	0	14
	0.09	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.26	0.00	0.00	1.23
	7.14	0.00	0.00	0.00	0.00	7.14	0.00	0.00	21.43	0.00	0.00	
	5.88	0.00	0.00	0.00	0.00	0.88	0.00	0.00	2.65	0.00	0.00	
Total	17	11	99	48	50	113	7	16	113	108	24	1138
	1.49	0.97	8.70	4.22	4.39	9.93	0.62	1.41	9.93	9.49	2.11	100.00

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SAS

TABLE OF CODER BY CAT

Coder	Cat											Total	
		31	32	33	34	35	36	41	42	43	44		51
Coder 1	Frequency	0	5	1	2	4	0	7	0	4	5	4	
	Percent	0.00	0.44	0.09	0.18	0.35	0.00	0.62	0.00	0.35	0.44	0.35	
	Row Pct	0.00	4.67	0.93	1.87	3.74	0.00	6.54	0.00	3.74	4.67	3.74	9.40
	Col Pct	0.00	11.63	2.78	6.45	9.09	0.00	14.58	0.00	7.55	15.15	15.38	
Coder 2	Frequency	13	24	16	18	24	4	17	3	11	12	8	
	Percent	1.14	2.11	1.41	1.58	2.11	0.35	1.49	0.26	0.97	1.05	0.70	
	Row Pct	2.44	4.51	3.01	3.38	4.51	0.75	3.20	0.56	2.07	2.26	1.50	46.75
	Col Pct	92.86	55.81	44.44	58.06	54.55	57.14	45.42	27.27	20.75	36.36	30.77	
Coder 3	Frequency	0	9	12	8	10	3	22	7	33	12	12	
	Percent	0.00	0.79	1.05	0.70	0.88	0.26	1.93	0.62	2.90	1.05	1.05	
	Row Pct	0.00	2.37	3.17	2.11	2.64	0.79	5.80	1.85	8.71	3.17	3.17	379
	Col Pct	0.00	20.93	33.33	25.91	22.73	42.86	45.83	63.64	62.26	36.36	46.15	33.30
Coder 4	Frequency	1	4	7	3	6	0	1	1	4	3	1	
	Percent	0.09	0.35	0.62	0.26	0.53	0.00	0.09	0.09	0.35	0.26	0.09	
	Row Pct	0.94	3.77	6.60	2.83	5.66	0.00	0.94	0.94	3.77	2.83	0.94	106
	Col Pct	7.14	9.30	19.44	9.68	13.64	0.00	2.08	9.09	7.55	9.09	3.85	9.31
Coder 5	Frequency	0	1	0	0	0	0	1	0	1	1	1	
	Percent	0.00	0.09	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.09	0.09	
	Row Pct	0.00	7.14	0.00	0.00	0.00	0.00	7.14	0.00	7.14	7.14	7.14	14
	Col Pct	0.00	2.33	0.00	0.00	0.00	0.00	2.08	0.00	1.89	3.03	3.85	1.23
Total	Frequency	14	43	36	31	44	7	48	11	53	33	26	
	Percent	1.23	3.78	3.16	2.72	3.87	0.62	4.22	0.97	4.66	2.90	2.28	1138
		100.00											

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SAS

TABLE OF CODER BY CAT

Coder	Cat									Total
	52	53	61	62	63	71	72	73	74	
	Frequency									
	Percent									
	Row Pct									
	Col Pct									
Coder 1	3	1	6	0	2	2	2	0	3	107
	0.26	0.09	0.53	0.00	0.18	0.18	0.18	0.00	0.26	9.40
	2.80	0.93	5.61	0.00	1.87	1.87	1.87	0.00	2.80	
	7.69	5.00	10.91	0.00	11.76	16.67	9.52	0.00	50.00	
Coder 2	17	16	27	3	10	5	5	2	1	532
	1.49	1.41	2.37	0.26	0.88	0.44	0.44	0.18	0.09	46.75
	3.20	3.01	5.08	0.56	1.88	0.94	0.94	0.38	0.19	
	43.59	80.00	49.09	60.00	58.82	41.67	23.81	18.18	16.67	
Coder 3	9	1	17	2	5	3	12	7	2	379
	0.79	0.09	1.49	0.18	0.44	0.26	1.05	0.62	0.18	33.30
	2.37	0.26	4.49	0.53	1.32	0.79	3.17	1.85	0.53	
	23.08	5.00	30.91	40.00	29.41	25.00	57.14	63.64	33.33	
Coder 4	8	2	3	0	0	2	2	2	0	106
	0.70	0.18	0.26	0.00	0.00	0.18	0.18	0.18	0.00	9.31
	7.55	1.89	2.83	0.00	0.00	1.89	1.89	1.89	0.00	
	20.51	10.00	5.45	0.00	0.00	16.67	9.52	18.18	0.00	
Coder 5	2	0	2	0	0	0	0	0	0	14
	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	1.23
	14.29	0.00	14.29	0.00	0.00	0.00	0.00	0.00	0.00	
	5.13	0.00	3.64	0.00	0.00	0.00	0.00	0.00	0.00	
Total	39	20	55	5	17	12	21	11	6	1138
	3.43	1.76	4.83	0.44	1.49	1.05	1.85	0.97	0.53	100.00

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APPENDIX C

SAS

TABLE OF BUREAU BY CAT

Bureau	Cat											Total
Frequency	11	12	13	14	15	16	21	22	23	24	25	
Percent												
Row Pct												
Col Pct												
1	6	5	18	8	7	22	4	3	26	25	8	219
	0.53	0.44	1.58	0.70	0.62	1.93	0.35	0.26	2.28	2.20	0.70	19.24
	2.74	2.28	8.22	3.65	3.20	10.05	1.83	1.37	11.87	11.42	3.65	
	35.29	45.45	18.18	16.67	14.00	19.47	57.14	18.75	23.01	23.15	33.33	
2	3	0	10	5	7	15	1	4	8	14	0	124
	0.26	0.00	0.88	0.44	0.62	1.72	0.09	0.35	0.70	1.23	0.00	10.90
	2.42	0.00	8.06	4.03	5.65	12.10	0.81	3.23	6.45	11.29	0.00	
	17.65	0.00	10.10	10.42	14.00	13.27	14.29	25.00	7.08	12.96	0.00	
3	1	1	35	5	12	13	0	2	15	28	3	191
	0.09	0.09	3.08	0.44	1.05	1.14	0.00	0.18	1.32	2.46	0.26	16.78
	0.52	0.52	18.32	2.62	6.28	6.81	0.00	1.05	7.85	14.66	1.57	
	5.88	9.09	35.35	10.42	24.00	11.50	0.00	12.50	13.27	25.93	12.50	
4	5	4	28	28	14	43	2	7	30	33	8	383
	0.44	0.35	2.46	2.46	1.23	3.78	0.18	0.62	2.64	2.90	0.70	33.66
	1.31	1.04	7.31	7.31	3.66	11.23	0.52	1.83	7.83	8.62	2.09	
	29.41	36.36	28.28	58.33	28.00	38.05	28.57	43.75	26.55	30.56	33.33	
5	0	0	4	0	3	3	0	0	2	3	2	70
	0.00	0.00	0.35	0.00	0.26	0.26	0.00	0.00	0.18	0.26	0.18	6.15
	0.00	0.00	5.71	0.00	4.29	4.29	0.00	0.00	2.86	4.29	2.86	
	0.00	0.00	4.04	0.00	6.00	2.65	0.00	0.00	1.77	2.78	8.33	
6	1	0	4	2	5	11	0	0	23	4	3	113
	0.09	0.00	0.35	0.18	0.44	0.97	0.00	0.00	2.02	0.35	0.26	9.93
	0.88	0.00	3.54	1.77	4.42	9.73	0.00	0.00	20.35	3.54	2.65	
	5.88	0.00	4.04	4.17	10.00	9.73	0.00	0.00	20.35	3.70	12.50	
7	1	1	0	0	2	6	0	0	9	1	0	38
	0.09	0.09	0.00	0.00	0.18	0.53	0.00	0.00	0.79	0.09	0.00	3.34
	2.63	2.63	0.00	0.00	5.26	15.79	0.00	0.00	23.68	2.63	0.00	
	5.88	9.09	0.00	0.00	4.00	5.31	0.00	0.00	7.96	0.93	0.00	
Total					50	113	7	16	113	108	24	1138
	100.00	100.00	100.00	100.00	41.35	92.93	9.62	14.31	92.93	92.49	2.11	100.00

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SAS

TABLE OF BUREAU BY CAT

Bureau	Cat											Total
Frequency	31	32	33	34	35	36	41	42	43	44	51	
Percent												
Row Pct												
Col Pct												
1	0	14	8	8	6	4	3	2	8	8	1	219
	0.00	1.23	0.70	0.70	0.53	0.35	0.26	0.18	0.70	0.70	0.09	19.24
	0.00	6.39	3.65	3.65	2.74	1.83	1.37	0.91	3.65	3.65	0.46	
	0.00	32.56	22.22	25.81	13.64	57.14	6.25	18.18	15.09	24.24	3.85	
2	4	3	5	7	6	0	6	0	3	5	0	124
	0.35	0.26	0.44	0.62	0.53	0.00	0.53	0.00	0.26	0.44	0.00	10.90
	3.23	2.42	4.03	5.65	4.84	0.00	4.84	0.00	2.42	4.03	0.00	
	28.57	6.98	13.89	22.58	13.64	0.00	12.50	0.00	5.66	15.15	0.00	
3	0	4	6	4	6	0	10	3	12	3	5	191
	0.00	0.35	0.53	0.35	0.53	0.00	0.88	0.26	1.05	0.26	0.44	16.78
	0.00	2.09	3.14	2.09	3.14	0.00	5.24	1.57	6.28	1.57	2.62	
	0.00	9.30	16.67	12.90	13.64	0.00	20.83	27.27	22.64	9.09	19.23	
4	7	15	14	12	19	1	23	3	18	11	7	383
	0.62	1.32	1.23	1.05	1.67	0.09	2.02	0.26	1.58	0.97	0.62	33.66
	1.83	3.92	3.66	3.13	4.96	0.26	6.01	0.78	4.70	2.87	1.83	
	50.00	34.88	38.89	38.71	43.18	14.29	47.92	27.27	33.96	33.33	26.92	
5	0	0	2	0	2	0	2	2	9	3	7	70
	0.00	0.00	0.18	0.00	0.18	0.00	0.18	0.18	0.79	0.26	0.62	6.15
	0.00	0.00	2.86	0.00	2.86	0.00	2.86	2.86	12.86	4.29	10.00	
	0.00	0.00	5.56	0.00	4.55	0.00	4.17	18.18	16.98	9.09	26.92	
6	3	6	1	0	5	2	2	0	0	1	3	113
	0.26	0.53	0.09	0.00	0.44	0.18	0.18	0.00	0.00	0.09	0.26	9.93
	2.65	5.31	0.88	0.00	4.42	1.77	1.77	0.00	0.00	0.88	2.65	
	21.43	13.95	2.78	0.00	11.36	28.57	4.17	0.00	0.00	3.03	11.54	
7	0	1	0	0	0	0	2	1	3	2	3	38
	0.00	0.09	0.00	0.00	0.00	0.00	0.18	0.09	0.26	0.18	0.26	3.34
	0.00	2.63	0.00	0.00	0.00	0.00	5.26	2.63	7.89	5.26	7.89	
	0.00	2.33	0.00	0.00	0.00	0.00	4.17	9.09	5.66	6.06	11.54	
Total	14	37	27	31	44	7	48	11	53	33	26	1138
	1.23	3.23	2.31	2.72	3.87	0.62	4.22	0.97	4.66	2.90	2.28	100.00

98.

SAS

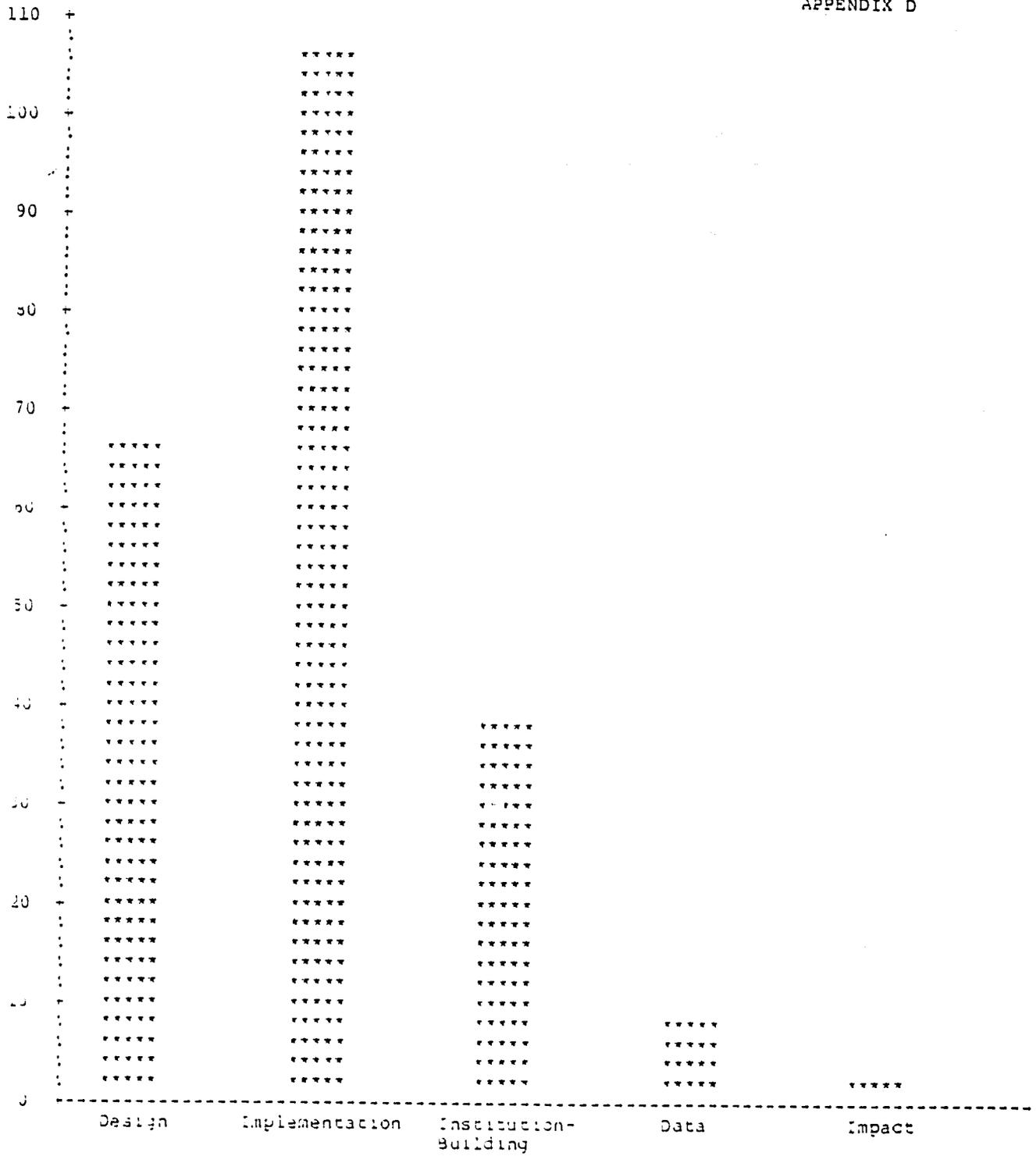
TABLE OF BUREAU BY CAT

Bureau	Cat									
Frequency	52	53	61	62	63	71	72	73	74	Total
Percent										
Row Pct										
Col Pct										
1	6	9	8	0	0	0	2	0	0	219
	0.53	0.79	0.70	0.00	0.00	0.00	0.18	0.00	0.00	19.24
	2.74	4.11	3.65	0.00	0.00	0.00	0.91	0.00	0.00	
	15.38	45.00	14.35	0.00	0.00	0.00	9.52	0.00	0.00	
2	7	2	4	2	0	1	0	0	2	124
	0.62	0.18	0.35	0.18	0.00	0.09	0.00	0.00	0.18	10.90
	5.65	1.61	3.23	1.61	0.00	0.81	0.00	0.00	1.61	
	17.95	10.00	7.27	40.00	0.00	8.33	0.00	0.00	33.33	
3	6	2	5	1	1	0	5	2	1	191
	0.53	0.18	0.44	0.09	0.09	0.00	0.44	0.18	0.09	16.78
	3.14	1.05	2.62	0.52	0.52	0.00	2.62	1.05	0.52	
	15.38	10.00	9.09	20.00	5.88	0.00	23.81	18.18	16.67	
4	10	7	12	0	4	6	6	4	2	383
	0.88	0.62	1.05	0.00	0.35	0.53	0.53	0.35	0.18	33.66
	2.61	1.83	3.13	0.00	1.04	10.57	1.57	1.04	0.52	
	25.64	35.00	21.82	0.00	23.53	50.00	28.57	36.36	33.33	
5	5	0	3	1	4	2	6	5	0	70
	0.44	0.00	0.26	0.09	0.35	0.18	0.53	0.44	0.00	6.15
	7.14	0.00	4.29	1.43	5.71	2.86	8.57	7.14	0.00	
	12.82	0.00	5.45	20.00	23.53	16.67	28.57	45.45	0.00	
6	2	0	21	1	8	3	1	0	1	113
	0.18	0.00	1.85	0.09	0.70	0.26	0.09	0.00	0.09	9.93
	1.77	0.00	18.58	0.88	7.08	2.65	0.88	0.00	0.88	
	5.13	0.00	38.18	20.00	47.06	25.00	4.76	0.00	16.67	
7	3	0	2	0	0	0	1	0	0	38
	0.26	0.00	0.18	0.00	0.00	0.00	0.09	0.00	0.00	3.34
	7.89	0.00	5.26	0.00	0.00	0.00	2.63	0.00	0.00	
	7.69	0.00	3.64	0.00	0.00	0.00	4.76	0.00	0.00	
Total	113	113	113	5	17	12	21	11	6	1138
	100.00	100.00	100.00	0.44	1.49	1.05	1.85	0.97	0.53	100.00

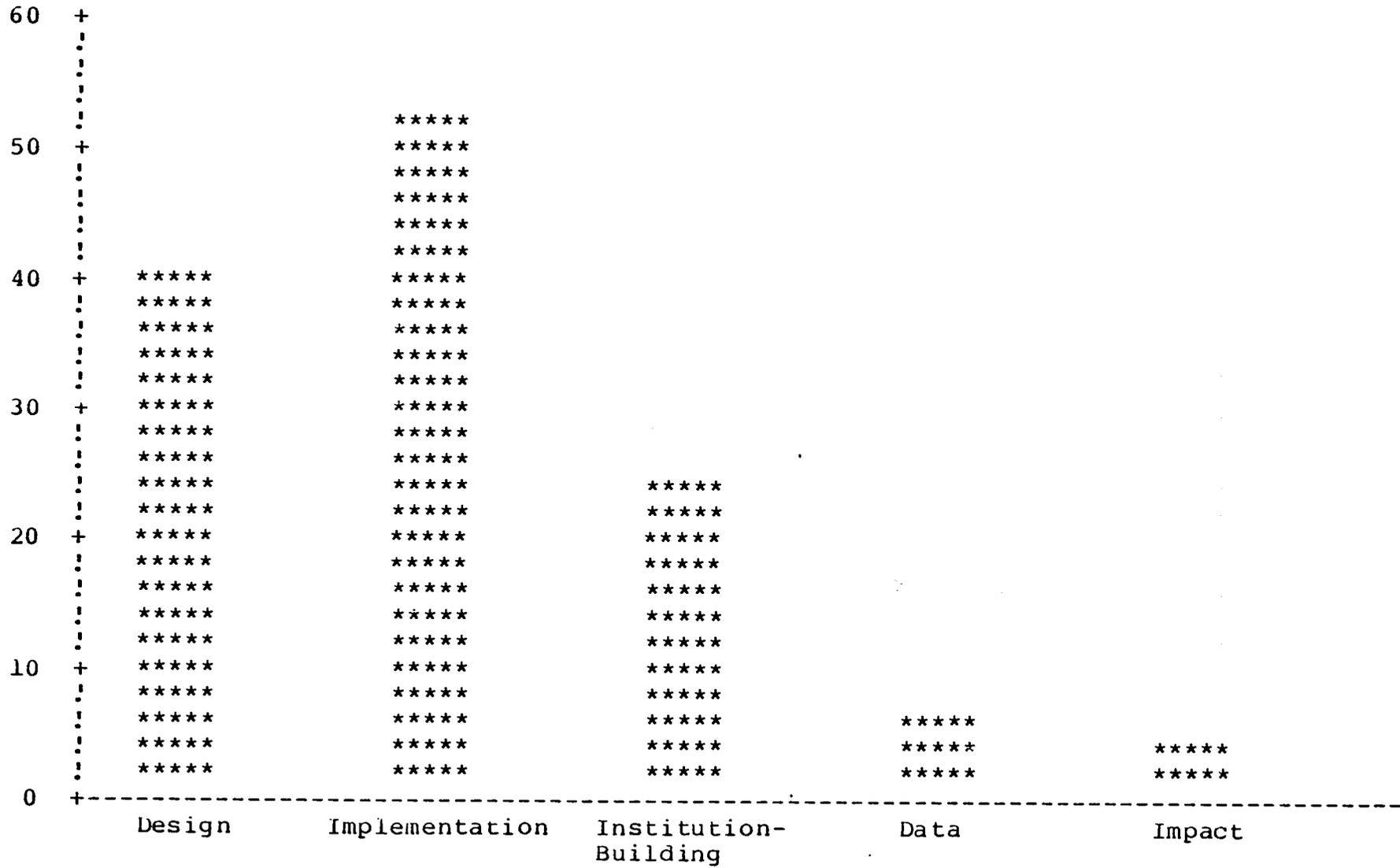
- (A)

NEAR EAST

APPENDIX D

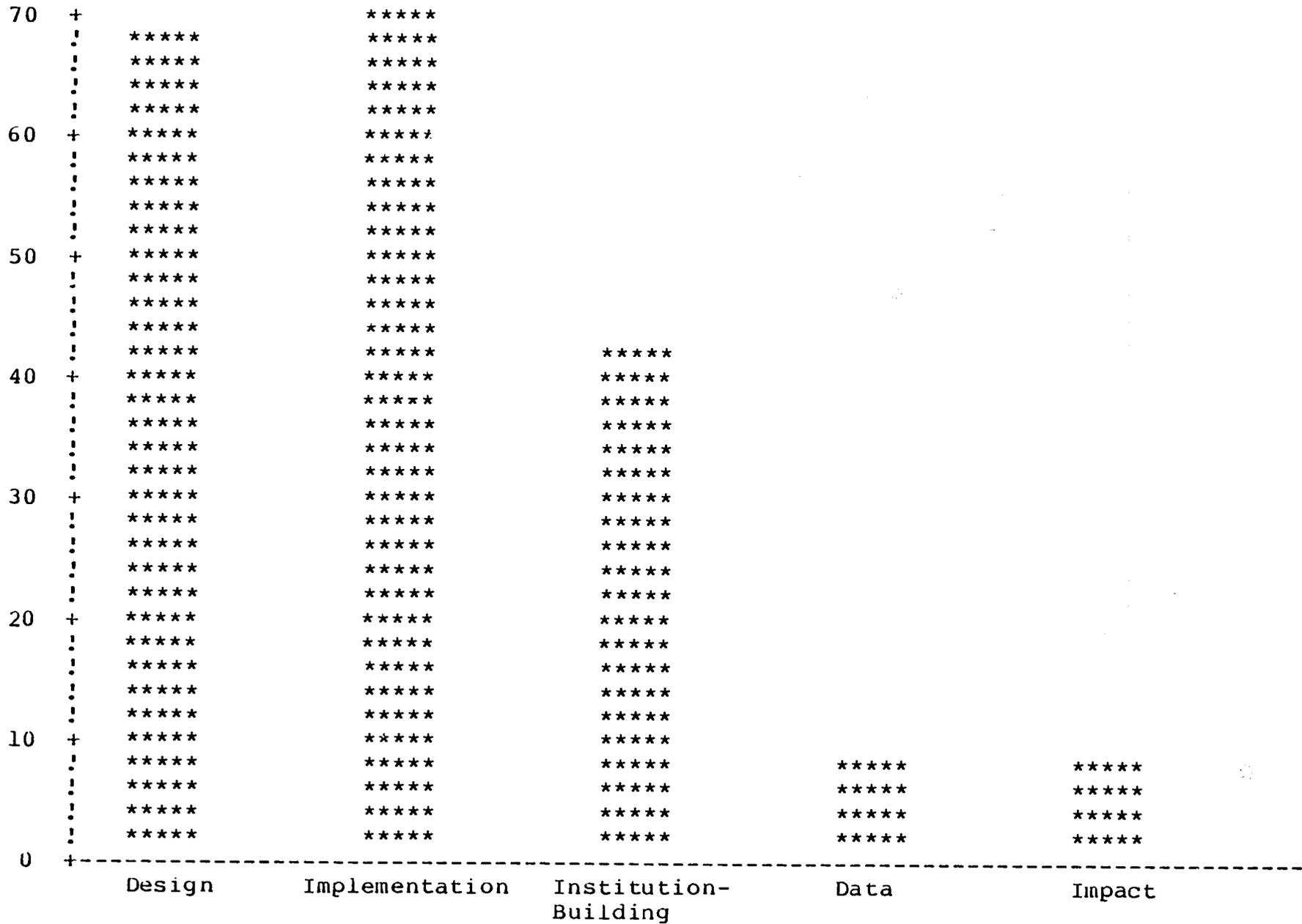


FAR EAST



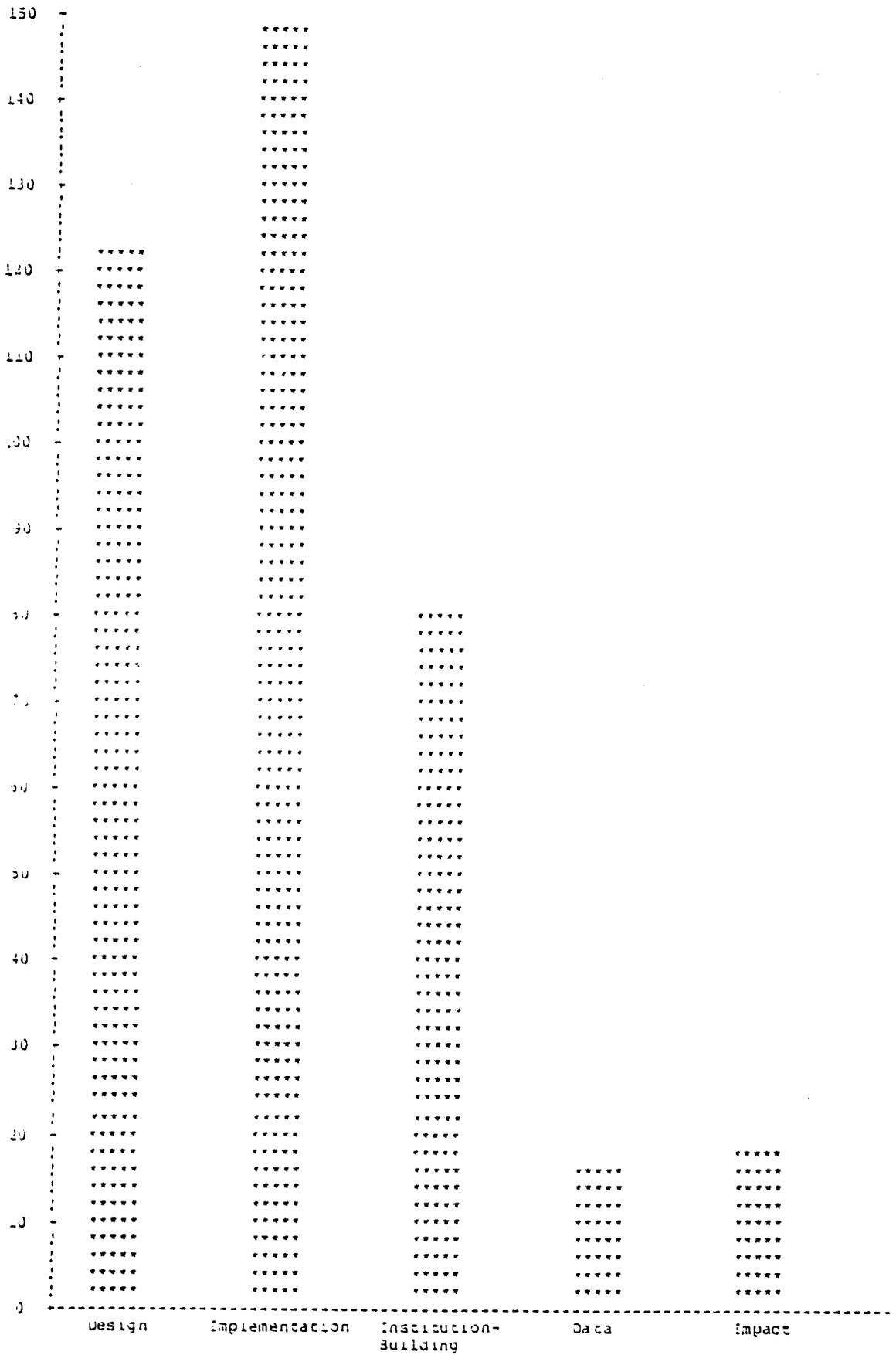
101

LATIN AMERICA AND THE CARIBBEAN

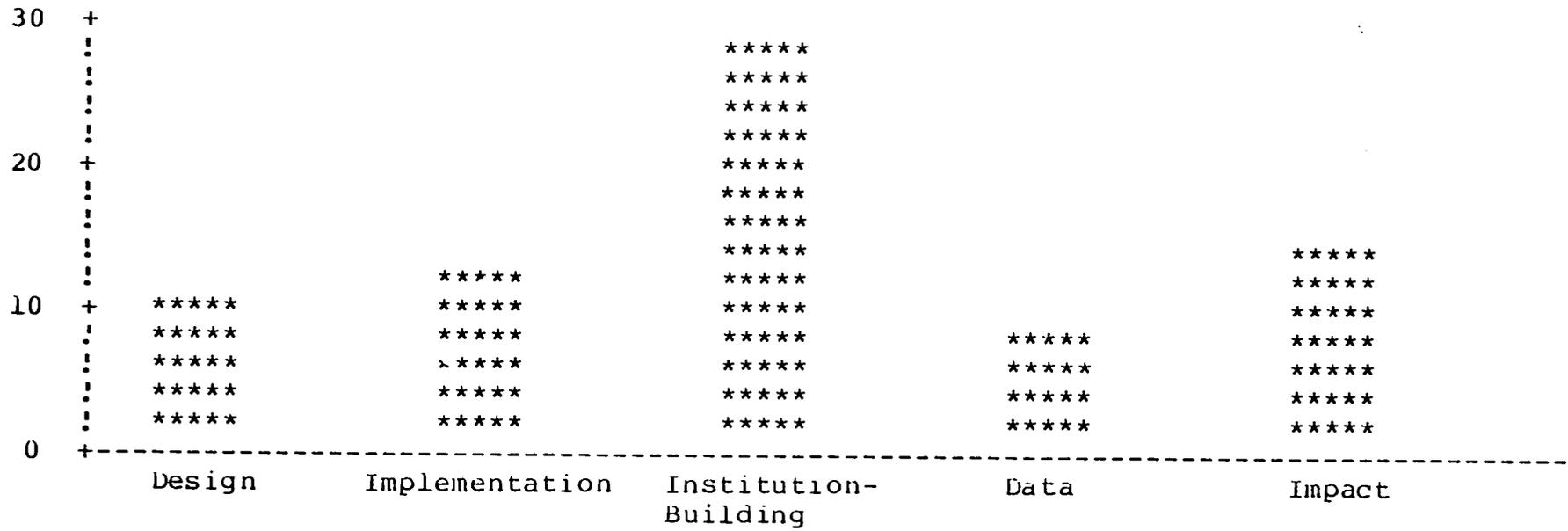


102-

AFRICA

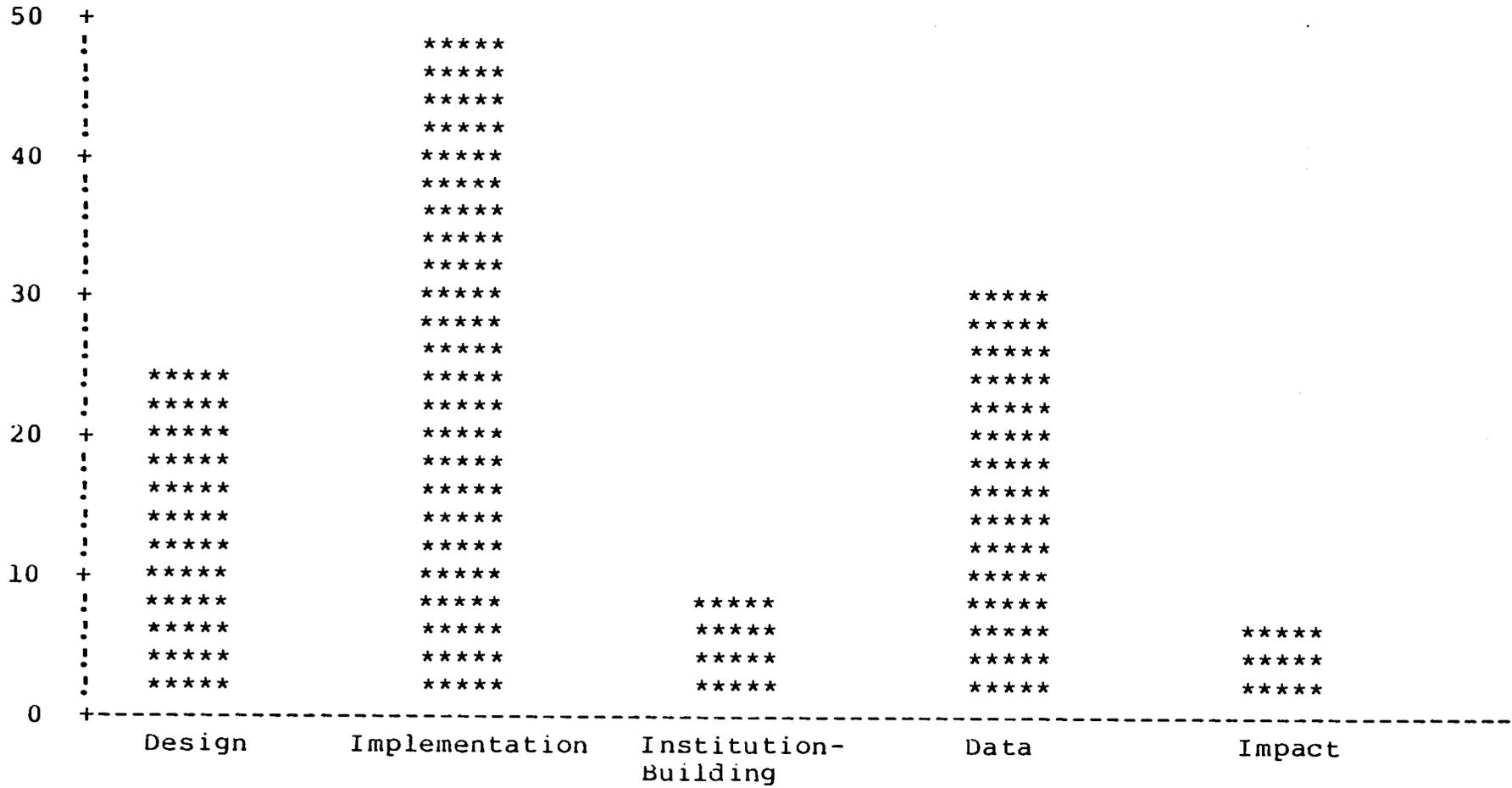


IMPACT

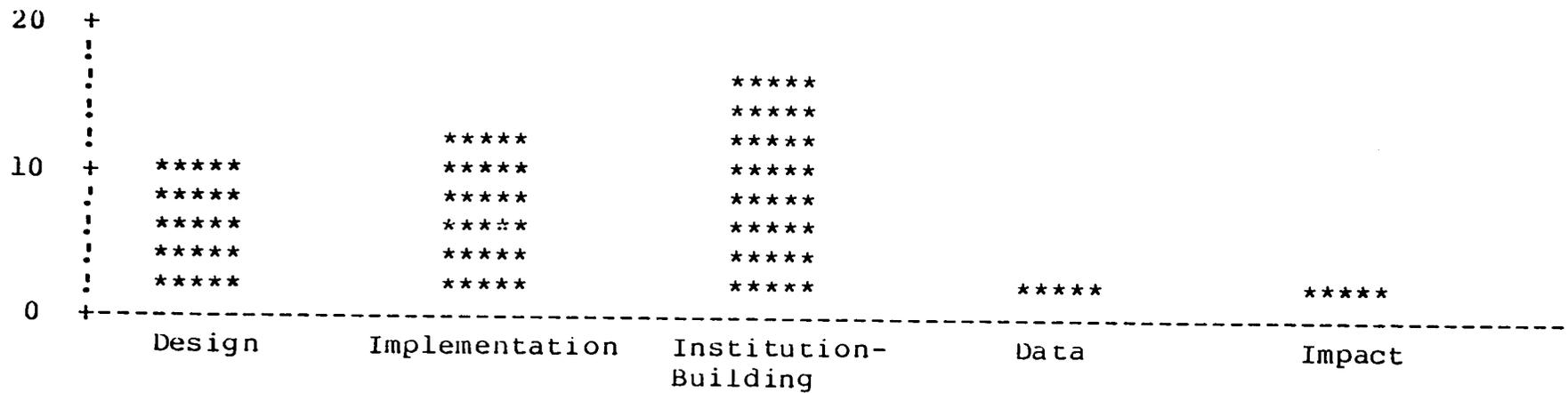


104-

SCIENCE & TECHNOLOGY

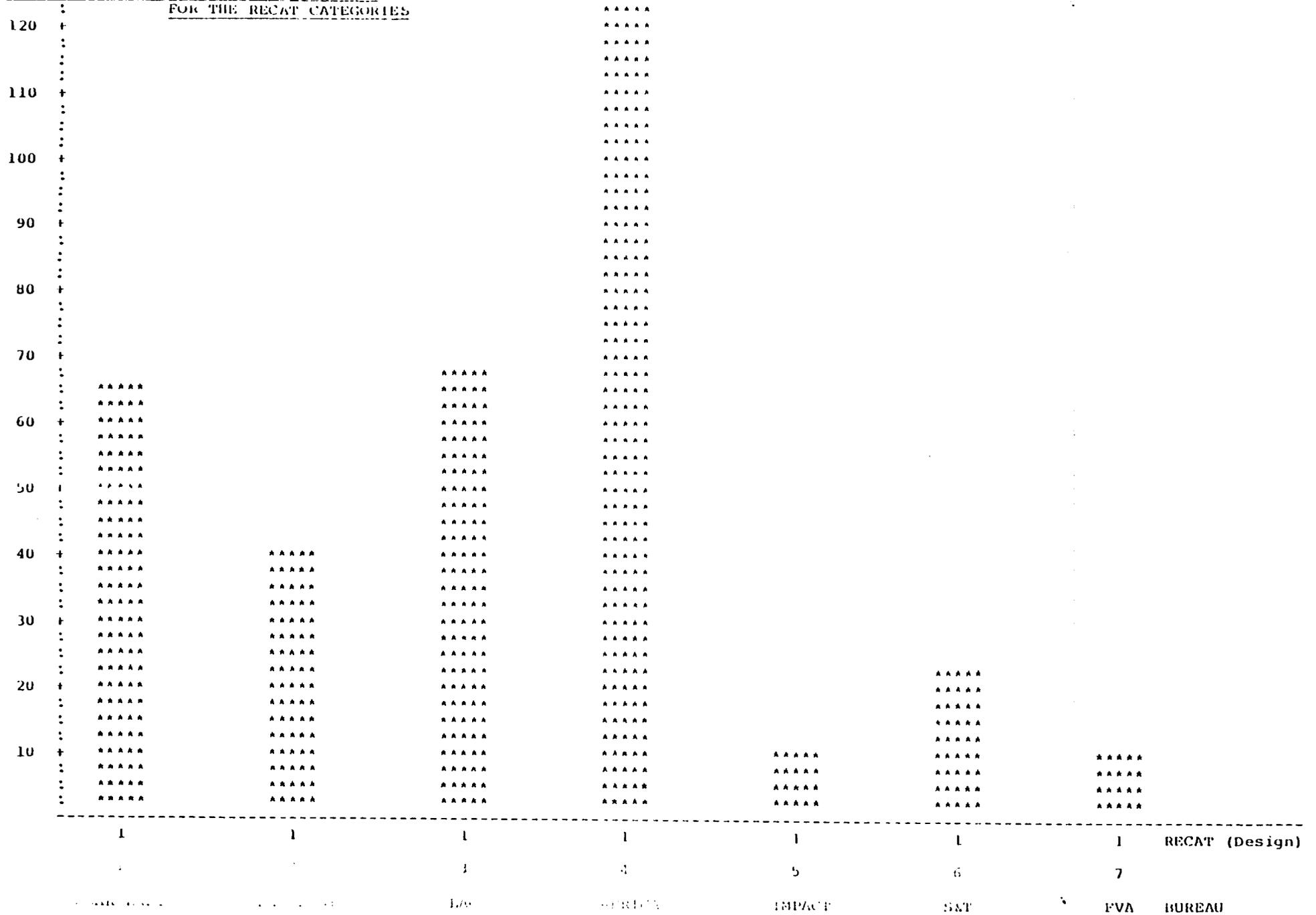


FOOD & VOLUNTARY ASSISTANCE



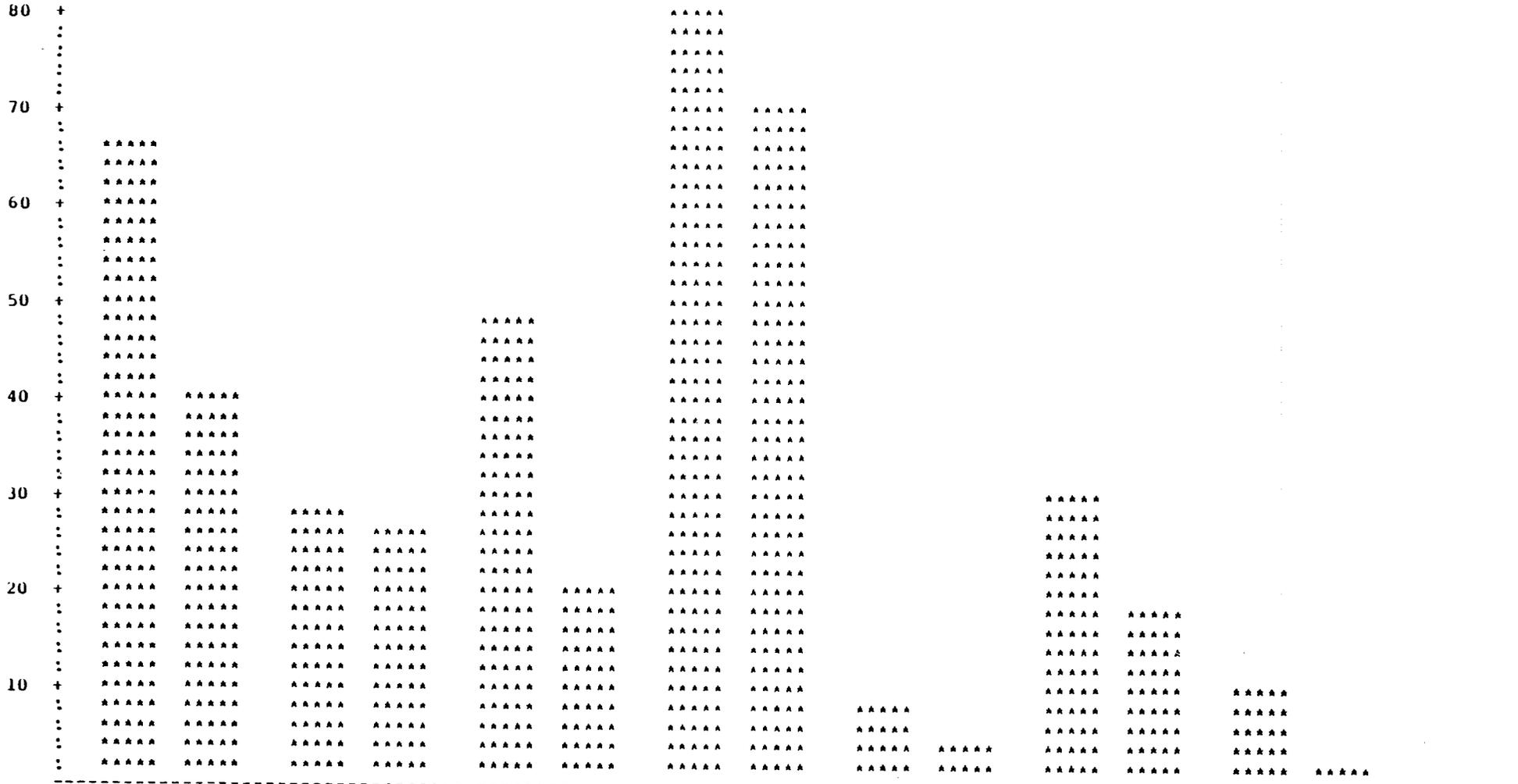
APPENDIX E

FREQUENCY OF FINDINGS BY BUREAU FOR THE RECAT CATEGORIES



107

FREQUENCY

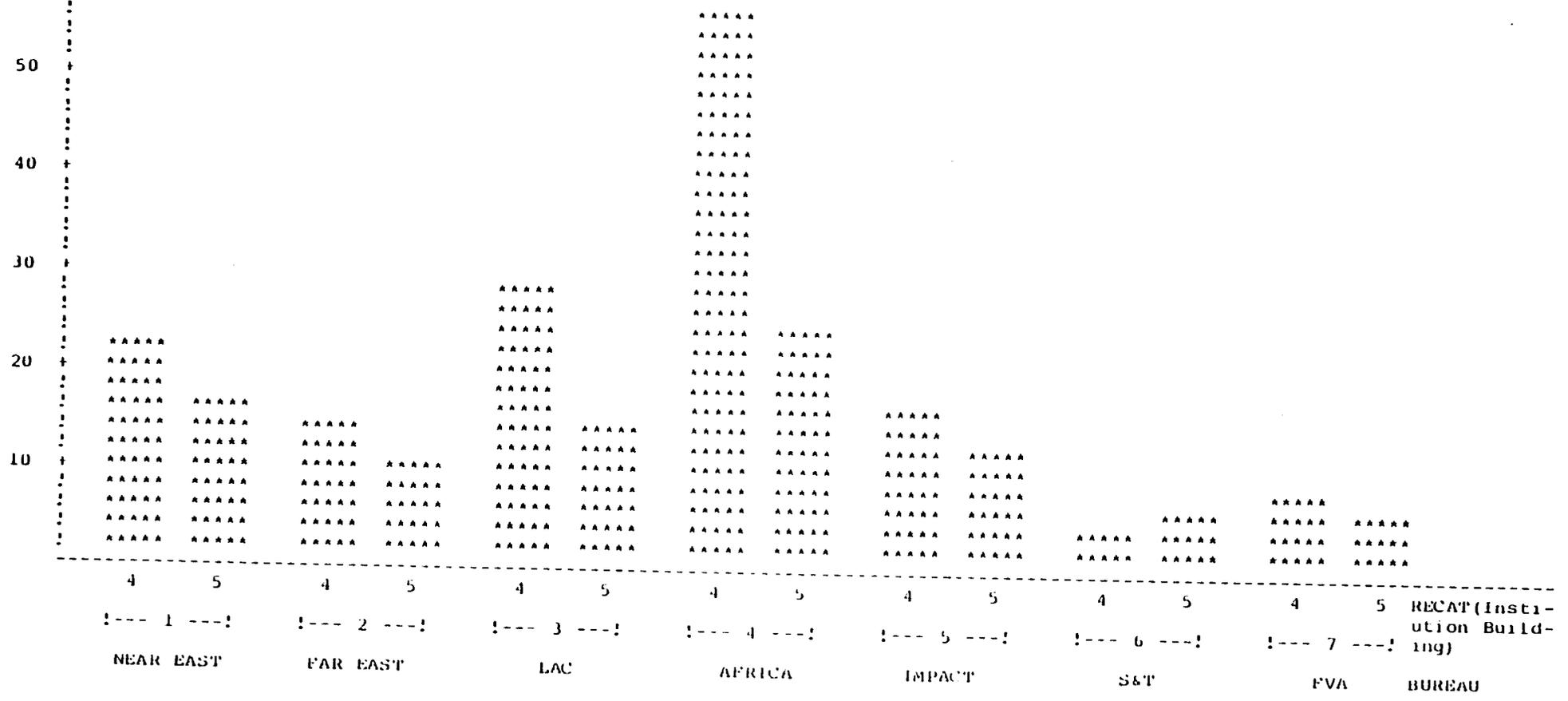


RECAT (Implementation)

1. Bureau 2. FVA 3. BUREAU 4. 5. 6. 7. FVA BUREAU

100

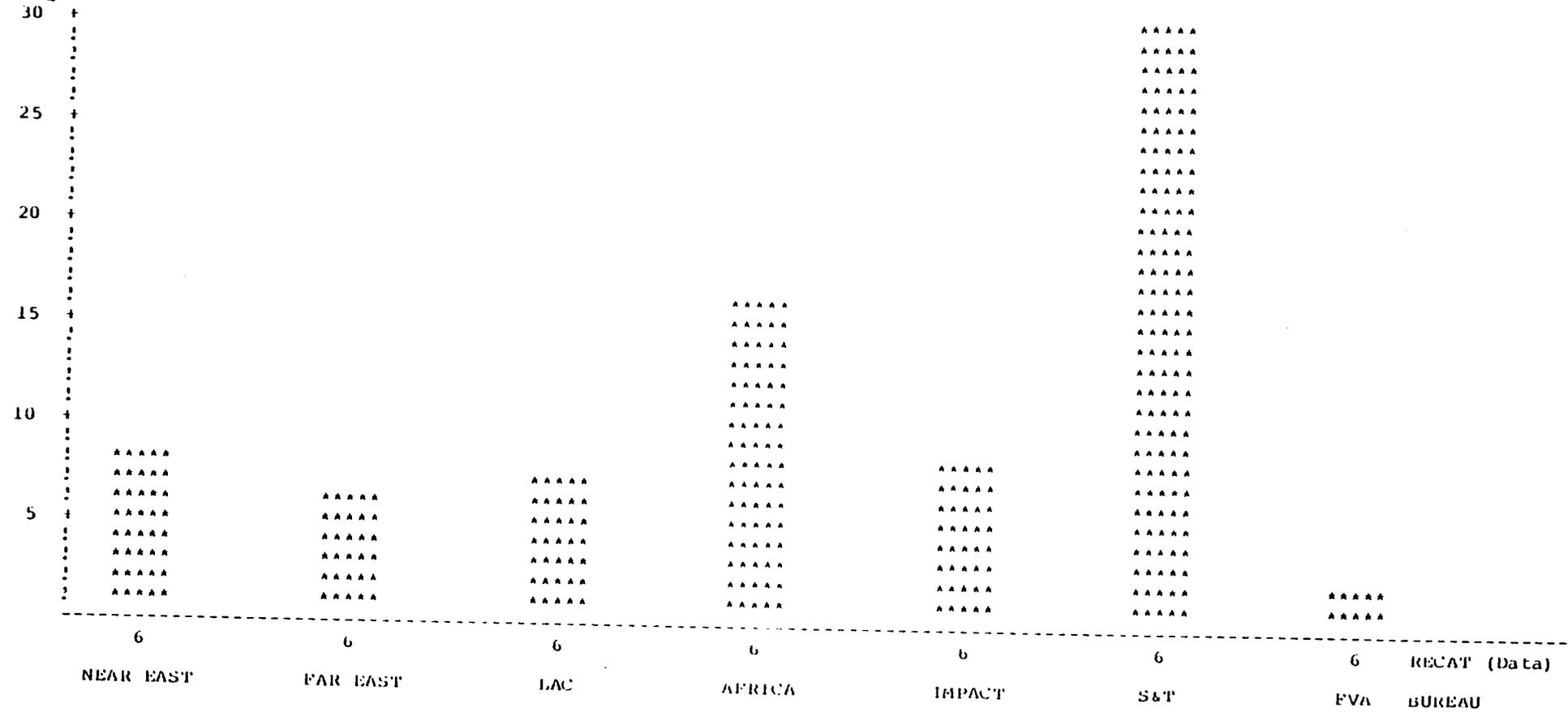
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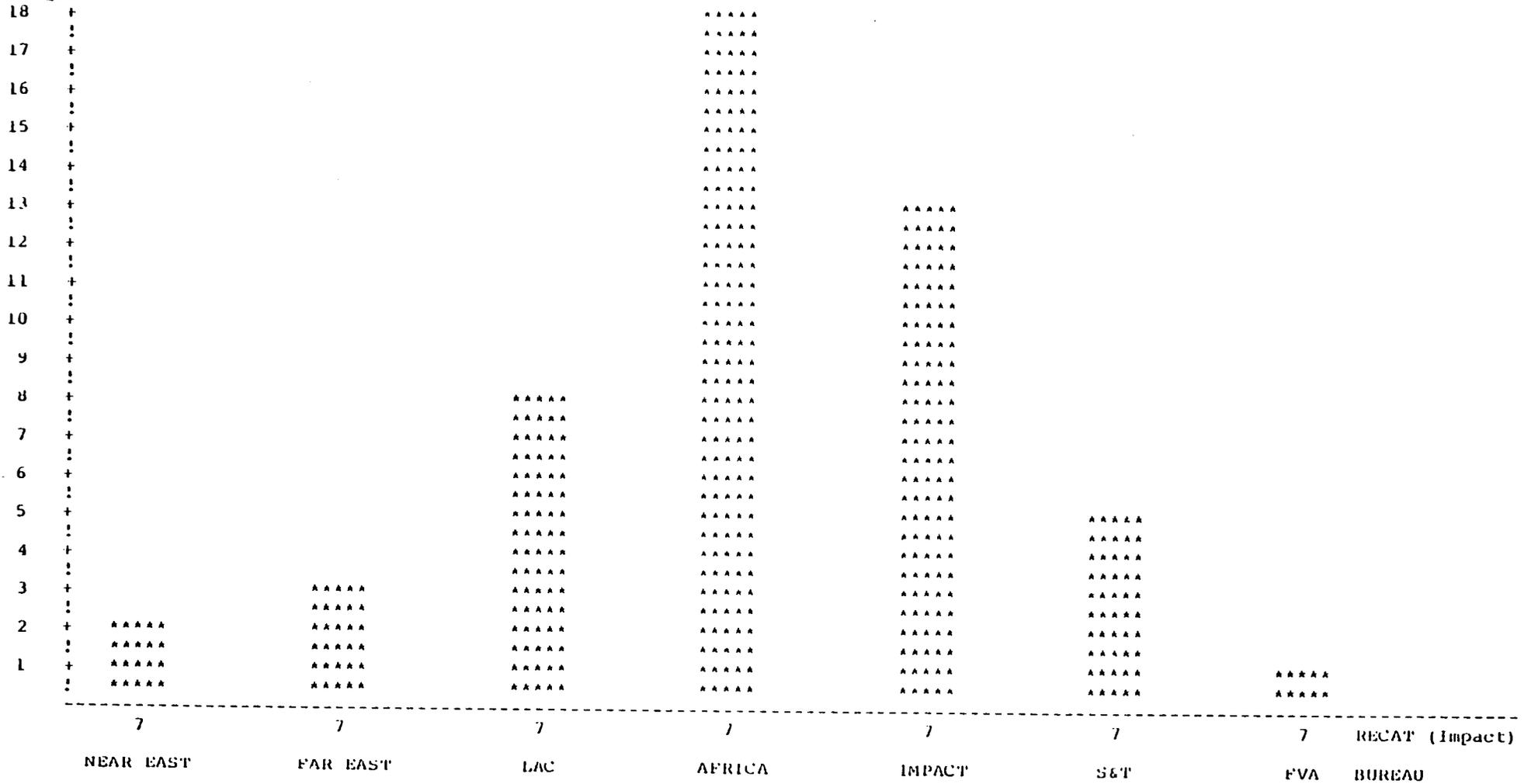
RECAT (Insti-
ution Build-
ing)

101

FREQUENCY



FREQUENCY



1111

Techcode

Techcode	Count	Freq	Percent	Percent
0	221	221	19.42	19.42
1	41	262	3.60	23.02
2	14	276	1.23	24.25
3	34	310	2.99	27.24
4	3	313	0.26	27.50
5	72	385	6.33	33.83
6	28	413	2.46	36.29
7	89	502	7.82	44.11
8	1	503	0.09	44.20
9	3	506	0.26	44.46
10	7	513	0.62	45.08
11	15	528	1.32	46.40
14	4	532	0.35	46.75
15	9	541	0.79	47.54
20	17	558	1.49	49.03
21	13	571	1.14	50.18
23	9	580	0.79	50.97
24	15	595	1.32	52.28
25	10	605	0.88	53.16
31	6	611	0.53	53.69
32	8	619	0.70	54.39
34	5	624	0.44	54.83
41	5	629	0.44	55.27
42	2	631	0.18	55.45
44	2	633	0.18	55.62
45	6	639	0.53	56.15
46	5	644	0.44	56.59
50	5	649	0.44	57.03
51	25	674	2.20	59.23
54	40	714	3.51	62.74
55	1	715	0.09	62.83
58	18	733	1.58	64.41
59	1	734	0.09	64.50
60	9	743	0.79	65.29
61	27	770	2.37	67.66
63	59	829	5.18	72.85
64	3	832	0.26	73.11
66	7	839	0.62	73.73
67	3	842	0.26	73.99
69	7	849	0.62	74.60
70	3	849	0.26	74.60
71	5	854	0.44	75.04
72	31	885	2.72	77.77
73	9	894	0.79	78.56
74	3	897	0.26	78.82
76	17	914	1.49	80.32
81	2	916	0.18	80.49
82	10	926	0.88	81.37
83	7	933	0.62	81.99
85	10	943	0.88	82.86
86	4	947	0.35	83.22
87	38	985	3.34	86.56
92	35	1020	3.08	89.63
94	23	1043	2.02	91.65
95	14	1057	1.23	92.88
96	11	1068	0.97	93.85
97	13	1081	1.14	94.99
	26	1107	2.28	97.28
	10	1137	2.64	99.91
	1	1138	0.09	100.00

11/20

10 20 30 40 50 60 70 80 90 100 110 120

100 200 300 400