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THE COOPERATIVE EXTENSION SERVICE:

A DELAWARE ASSESSMENT

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1. INTRODUCTION

American society has undergone significant socio-economic changes since the Cooperative Extension Service was instituted on a national scale during the 1920's. As an important public agency with a fundamental community service orientation, Extension has responded to such changes with the development of new programs that now serve a more diverse clientele. While its traditional educational programs were directed toward farm and rural area residents, Extension has gradually expanded its role by developing services for urban residents and other specialized client groups. County Extension offices have become multi-faceted community service agencies, serving various segments of the general public by providing programs dealing with agricultural, home economics, 4-H youth, and community development issues.

Study Purpose

The assumption of expanded program responsibilities, however, has resulted in additional concerns, at both the national and state levels, about the continued and/or future effectiveness of the Cooperative Extension Service. Such concerns have been addressed primarily through various types of evaluation studies and reports. A 1982 national evaluation study, for example, used a comprehensive framework to examine the overall functioning of this public agency within its larger organizational environment. And the purpose of this Delaware study, in effect, was to conduct a similarly extensive assessment at the state and county levels of operation. This information should prove useful in helping Extension in Delaware to better understand its changing role in the provision of needed and critical community services.

Research Methodology

During the fall of 1984 and the spring of 1985, a study was conducted by the Delaware Household Survey Project, College of Urban Affairs and Public Policy, to evaluate the effectiveness of Extension in communicating its aims and services to the general public in Delaware. A total of 434 household telephone surveys were completed statewide. This included 214 surveys from New Castle County, 110 from Kent County, and 110 from Sussex County. The sample was designed to maximize the accuracy rate at both the county and state levels of analysis; county households were in effect oversampled in order that study findings could be statistically compared with the lowest possible error rate. The sample size was also sufficiently large to compare and contrast outcomes for various subsets of cases. The number of cases enabled researchers to evaluate effectiveness by controlling for different factors such as: characteristics of respondents; type of program area; and characteristics of program clients. Each of the four major program areas--agriculture, homemaker, community development,

4-H youth--and Extension as an organization was investigated in terms of public awareness, utilization, public satisfaction, and funding support indicators. Outcomes were analyzed for the 434 surveys as a whole, as well as for each individual county.

Report Outline

Section 2 of this report provides an account of respondent characteristics and study findings for the state as a whole. Conclusions and recommendations are provided in section 3. Separate detailed reports have been prepared for each of the three counties.

2. RESPONDENTS AND FINDINGS: STATEWIDE EVALUATION

Characteristics of Respondents

In Table 1, survey respondent characteristics are compared with 1980 census data to determine whether the household sample selected for this study was indeed representative of Delaware's general population. An essential requirement of any sample is that it be as representative as possible of the population from which it is drawn, so that the analyses produce results equivalent to those that would be obtained had the entire population been surveyed.

The table shows that survey respondents are highly representative of the age structure of the state's adult population. Female respondents were over-represented; this is typical of household telephone surveys, though. The survey reached a smaller proportion of less-educated residents (less than high school); and a smaller proportion of low and middle-income residents (particularly those with incomes under \$10,000). Survey respondents closely matched the state's proportions of white and nonwhite residents.

Census data covering previous places of residence--where respondents were raised--is not available. The current place of residence for survey respondents closely parallels the distribution of all households by size of community, although rural groups (both farm and nonfarm) were slightly over-represented in the survey sample. So it is not a surprise that the proportion of farm owners or operators was higher in the survey than for the state as a whole. Homeowners were also slightly over-represented in this survey. In terms of employment status, respondents classified as unemployed were over-represented; retired and homemaker respondents (or those not in the labor force) were under-represented. Single-parent families were over-represented in this survey, with the consequence that single-person households and families without children were under-represented.

Comparing the distribution of respondent characteristics with 1980 census data for the state of Delaware has provided a check of the sampling selection process used in this public opinion study. While there are differences in the values of certain socio-economic characteristics, those differences do not seem to be significant, and it is fair to assume that this was a representative sample. And given the kind of program concerns and client groups that Extension wanted to examine through this evaluation, the sample should prove more than adequate.

Analysis of Study Findings

Awareness and Image of Extension Services

Public opinion or awareness of an organization and its programs precedes client use, satisfaction and support. Therefore, the first part of this study examined the public image and extent of awareness of Extension services in this state.

Respondents were first asked if they had ever heard of Extension (the entire organization or public agency) and then asked if they had heard of the four major program areas. Table 2-A shows the percentage of respondents who indicated an awareness on a statewide basis. Compared to the national 1982 study, more Delaware respondents recognized the organization's name (60% to 40%), but indicated a lower overall level of awareness of Extension and/or its programs (79% to 87%). Of all the four program areas, 62% of the respondents had heard of the 4-H youth program; 47% were aware of the agriculture programs; 35% recognized the homemaker program; and 23% were aware of the community development program. The overall level of awareness varied from a low of 76% in New Castle and Kent Counties to a high of 86% in Sussex County. New Castle County respondents were significantly less aware of all the program areas except for the 4-H youth program.

When awareness was examined on the basis of respondent characteristics, significant differences were found in terms of age, race, income and other variables. Everyone who lived on a farm was much more familiar with Extension as an organization and its programs than were people living in rural or urban areas. Persons from rural areas and small towns were more aware of Extension than were persons from the city, although the differences in level of recognition were not great. Young adults were significantly less aware of Extension than were all other age groups; those aged 40 to 64 years were most aware. The lowest level of awareness was among persons with incomes between \$20,000 to \$29,000, although persons with incomes below \$10,000 were significantly less familiar with Extension than were persons in higher income groups. White respondents were significantly more knowledgeable about Extension than were nonwhite or minority respondents. Persons with a lower level of education (under 12 years) were significantly less aware of Extension, although high school graduates had the overall lowest level of awareness of all

educational categories. Homeowners were much more aware or knowledgeable than were renters, as were employed and retired persons. Persons from two-parent and single-parent families were much less aware of Extension and/or its programs than were families without children (which includes many elderly households).

When awareness was examined on the basis of program areas, significant differences were also found. Respondents who had the highest recognition of the organizational name, Cooperative Extension Service, were in their middle years (aged 40 to 64), while young adults had the lowest awareness. Minorities had a significantly lower degree of awareness of Cooperative Extension. Awareness generally increased with level of education and income. Rural families and homeowners were more aware of Cooperative Extension than other groups, as were Sussex County residents in comparison to New Castle and Kent County households.

Agricultural programs were least known by young adults, New Castle County residents, persons with low incomes and low levels of education, and persons in two-parent families; these programs were best known by whites, farmers, and homeowners. Homemaker programs were known to a similar audience in that young adults, persons in two-parent families, and New Castle County residents in particular were less aware of the program; farmers were the most knowledgeable group.

Respondents most knowledgeable about the community development program were people raised on farms; those less aware were young adults, and New Castle and Kent Counties residents. Contrary to the other program areas, there were no significant differences in respondent awareness by education level, income level, race, current residence, or employment status. The 4-H youth program had the greatest level of recognition of all four areas, particularly among whites and homeowners. There were no significant differences in respondent awareness by education level, income level, current residence, employment status, family composition or county residence. Since persons aged under 18 were not included in the survey, however, the level of awareness by young adults regarding this program is significantly lower than that of other age groups.

Survey respondents who were aware of Extension and/or its programs were also asked about their knowledge of local offices and locations in each county. Less than half of the respondents (49%) knew that there was an Extension Service office in their county. Of those who indicated that there is a local or county office, about one fifth of the respondents (23%) knew the exact location of that office, while 17% could approximate the actual office location. Sussex County respondents were more aware that there was a county office (68%), while New Castle and Kent County respondents were more likely to know the location or approximate location of such offices (45% and 47%, respectively). This information is presented in Table 3.

Extension's Clientele

Although Extension's mandate has been to serve primarily agricultural and rural area families, other segments of the population have been increasing their demands for programs. So determining exactly who are Extension's clients and program users in Delaware is covered in the next part of this study.

Since persons aged 18 or under were not included as respondents, it was decided to try and profile these users retrospectively by asking respondents about their past involvement with 4-H. Table 4 presents data on the characteristics of persons involved in 4-H programs as youths or leaders. For the state as a whole, 13% of all respondents had been a 4-H member as a youth, and 6% had been 4-H program leaders or helpers. Persons who were raised on a farm had been significantly more involved as 4-H program participants, while persons now living on farms were much less likely to be associated with 4-H programs. For both categories of respondents (youth members or program leaders), there were no differences between participants and non-participants by age group, education level, income level, family composition or county residence. The highest percentage of program participants were women, middle-aged, and white persons now living in rural areas.

To provide a comprehensive picture of Extension's clientele in Delaware, survey respondents were asked if they or a household member had ever contacted Extension or used Extension services. Table 5 shows that 21% of the respondents identified their households as clients or users of services. To estimate more recent use of Extension services, respondents were next asked if they had contacted Extension within the past year; 8.5% of the respondents reported using services in the previous year. A composite or overall utilization measure is also shown on Table 5; 53% of all respondents identified themselves as an Extension client within that broader definition of user. The composite measure included persons who have contacted Extension, used its services, attended a workshop, listened to a radio or television program, received written materials, or read a newspaper article written by an Extension agent. This statewide use pattern is similar to that found in the national study mentioned earlier.

Comparisons of the distribution and characteristics of users and nonusers were also examined (see Table 5). While the highest percentage of Extension clients in our survey was located in New Castle County, this part of the state had a significantly lower proportion of respondents identified as using services than did Sussex County. Most of Extension's clients live in rural areas, rather than in a city or town or on a farm; proportionally, though, people living on farms have used Extension services more than people living in other places. While more users were raised in small towns than other places, a higher proportion of people who were raised on farms have used Extension services. No significant variations in use pattern by geographical distribution were found for respondents who contacted Extension in the past year.

No significant variations in use pattern by sex, education level, income level, farm or housing status, or family composition were found for respondents who contacted Extension in the past year. Young adults and employed persons were under-represented; whites were clearly over-represented. For those who had contacted Extension, however, there were significant variations between users and nonusers in terms of several characteristics. Young adults were under-represented among users; the highest percentage of users was in the 40 to 64 age group. Respondents with a lower level of education were also under-represented among users. Substantial variation was noted in use patterns by racial groups; whites clearly use Extension services more than nonwhites. Homeowners were also over-represented among users, while persons from two-parent families and employed persons were under-represented as clients.

A similar pattern of Extension use was found for those respondents identified within the broader definition of client. Persons raised or now living on farms or owning a farm were over-represented as Extension users. Extension clients were also more likely to be white and a homeowner; and less likely to be a young adult, with a lower level of education or income, or from a two-parent family. Seventy-two percent of Sussex County residents indicated having benefitted by one or more of Extension's activities, compared with only 47% of the respondents from New Castle County and 46% from Kent County. In short, Extension clientele, however identified, are predominately middle-class Delawareans.

To understand more fully the use patterns of Extension services, household use for the past year was examined in more detail in Table 6. For the state as a whole, agricultural programs were used by almost 6% of the respondents; home economics programs were used by 3%. Variations in program area use by respondent characteristics were not examined for local areas because of the small number of cases, although some observations are warranted. Persons over age 40 represent the majority of individuals contacting both Agricultural and Home Economics programs (no one reported contacting the other programs within the past year). Both program areas were used primarily by whites, those with a high school education, those with a higher income level, homeowners, and those living in rural areas. Farm families used agricultural programs only slightly more than home economics programs, while persons living in other places made more extensive use of home economics programs. Residents in New Castle form the considerable majority of agricultural programs' users. New Castle County residents also predominate in home economics' clientele, although Sussex County is well-represented. Kent County residents were not taking advantage of Extension services and activities in proportion to their presence in the state population.

In addition to the question of who contacted Extension, respondents were asked in what way they used Extension (see Table 6). Extension contacts came through publications and mass media methods rather than through group meetings or personal contact.

Less than 2% of all respondents had attended a meeting or workshop in the previous year; almost 20% or even 30% had received written materials or listened to radio or television programs during that period. Meetings or workshops were more likely to be attended by females, older persons, or rural area residents. While Extension reached a fairly low proportion of nonwhites, those who were contacted reported receiving written materials. The majority of Extension clients are located in rural areas (although many live in urban areas), and Extension has continued to reach a high proportion of farm families. Some individuals or groups may still be excluded from or under-represented in Extension programs, based on such factors as race, income or educational level. Determining Extension's present and future clientele is certainly one of the most important issues now facing this community-based service organization.

Satisfaction with Extension's Performance

Public agencies such as Extension are often encouraged to assess the effectiveness of their programs in terms of consumer or client perceptions and demands. The next part of the survey measured client satisfaction opinions. Respondents were asked to express their sense of satisfaction about Extension in general, as well as their opinion about each program area, whether or not they had used a service. As shown in Table 8, 43% of the respondents statewide were satisfied with Cooperative Extension in general; 56% were unsure or didn't have an opinion; and 1% (5 persons) indicated dissatisfaction. When the unsure category is removed from the analysis, though, the proportion of satisfied respondents rose to 97%.

Each of the four program areas reflected a similar pattern of public satisfaction. For agricultural programs, 49% of the respondents were satisfied; 48% were unsure; and 3% indicated dissatisfaction. For homemaker programs, 31% were satisfied; 67% were unsure; and 2% (7 persons) reported being dissatisfied. Community development programs were rated as satisfactory by 20% of the respondents; 78% were unsure; and 2% (9 persons) were dissatisfied. The 4-H youth programs were rated as satisfactory by 39% of the respondents; 60% were unsure; and 1% were dissatisfied. When the unsure category is eliminated from the analysis, the proportion of satisfied respondents increased to 97%, 95%, 91%, and 97% for each of the program areas, respectively.

Assuming that persons who are not directly served by Extension would feel differently about its programs than do clients, public satisfaction was also examined by user status in Table 9. On a statewide basis, 83% of the respondents who had ever used or contacted Extension were satisfied with Cooperative Extension; 14% didn't have an opinion. In comparison, 32% of the nonuser respondents were satisfied while 67% didn't have an opinion. When the unsure category is eliminated from the analysis, however, the proportions of satisfied user and nonuser respondents are much more alike: 96% and 98%, respectively. And the levels of expressed

dissatisfaction were about the same for both users and nonusers of Cooperative Extension (3% and 1%). A similar level of satisfaction was apparent when only those respondents who used Extension in the past year were included and even when the broadest definition (overall utilization) of Extension client was examined.

Satisfaction is also very high for all of the four program areas when respondents were classified by user status. For agricultural programs, 74% of those who had ever used these Extension services were satisfied; 23% were unsure; and 3% were dissatisfied. By comparison, 30% of the nonusers were satisfied; 70% were unsure; and 1% was dissatisfied. When those respondents who indicated no definite opinion are removed from analysis, the proportions of users and nonusers who reported being satisfied increased to 96% and 98%, respectively. For the homemaker programs, 56% of the users were satisfied; 39% were unsure; and 5% were dissatisfied. In the nonuser category, 24% reported being satisfied; 75% were unsure; and 1% was dissatisfied. If the unsure category is removed, the recalculated percentages of satisfied users and nonusers rose to 91% and 98%. For those who had ever used the community development programs, 29% reported being satisfied; 69% were unsure; and 2% were dissatisfied. Only 17% of the nonusers were satisfied with this program; 81% were unsure; and 2% were dissatisfied. If the unsure category is removed, the recalculated percentages of satisfied users and nonusers changed to 93% and 89%. For the 4-H youth programs, 50% of those who had ever used this service were satisfied; 48% were unsure; and 2% were dissatisfied. By comparison, 28% of the nonusers were satisfied; 72% were unsure; and 1% was dissatisfied. When those respondents who indicated no definite opinion are removed, the proportions of users and nonusers who reported being satisfied increased to 96% and 97%, respectively. A similar level of satisfaction was found when just the respondents who had used Extension services during the past year were included, and even when the broadest definition (overall utilization) was examined.

In sum, respondents in the statewide survey were either highly satisfied with Cooperative Extension and each of the four program areas, or they had no firm opinion. Agricultural and 4-H youth programs were rated the highest, followed by homemaker programs and community development programs. The findings of this study showed that Extension clientele clearly like the services that they have received (particularly those served within the past year), while nonusers who did have an opinion about Extension were somewhat less likely to be satisfied. The differences in satisfaction ratings between users and nonusers is related to how many persons lacked sufficient information upon which to judge the merits of Extension services (the large number of persons in the unsure or don't know category). When this category of respondents is eliminated from the analysis, the level of satisfaction among nonusers is similar to that of users except in the case of community development programs. It is important to note that a sizeable portion of the population surveyed was classified as a nonuser (under the three alternative definitions cited above), and over two-thirds of the

nonusers have not formed an opinion of Extension, either positive or negative. When it is recalled that this nonuser group is more likely to consist of persons who are young adults, nonwhites, and/or individuals with a lower socio-economic status, then perhaps Extension should re-assess the nature of its programs and their intended audiences.

Funding Support for Cooperative Extension

Extension is a community-based, fairly autonomous public agency that attempts to be responsive to the needs of local citizens, but it must have adequate resources to survive as an organization. The next part of this study examined the level of support for government funding expressed by respondents.

Table 10 shows that respondents were asked how they felt about government spending levels for Cooperative Extension and each of its four program areas. Slightly over one-half of all respondents, whether they had used a service or not, expressed an opinion about public support for this agency. For the state as a whole, 6% of the respondents felt that Cooperative Extension as an agency should receive less funding; 45% felt it should receive the same amount; and 49% felt that it should receive more funding. When asked about agricultural programs, 4% of the respondents felt that they should receive less funding; 35% felt that the same amount should be given; and 62% felt that more funding should be spent. When asked about homemaker programs, 8% of the respondents felt that they should receive less funding; 45% felt that the same amount should be given; and 47% felt that more funding should be spent. In the case of community development programs, 7% suggested spending less; 37% suggested spending the same amount; and 56% felt that more funding should be spent. In the case of the 4-H youth programs, 4% suggested spending less; 40% suggested spending the same amount; and 56% felt that more funding should be spent.

Public support for Cooperative Extension and its four specific program areas did not vary significantly across counties. There were also no significant differences in the level of support expressed by users or nonusers of Extension services and no difference in level of funding support based on level of satisfaction with services. Support for the four program areas followed a fairly uniform pattern, demonstrating considerable support for increased funding in all areas of Extension, and revealing that only a very small minority of individuals would find funding cuts acceptable.

In short, the general sentiment among the public is for maintaining or even increasing the present level of government funding for Extension. Perhaps the tradition of extensive clientele involvement in program planning and the autonomy of county offices has contributed to that high level of expressed support.

The Public's Priority Service Areas

Respondents were next asked to help set public priorities for Extension's programs by indicating what level of importance should be placed on a given list of topics or services. Table 12 shows the results of this priority-setting exercise for two responses: "very great importance", and "great" or "very great" importance combined. On a statewide basis, about one-third of the respondents suggested that very great importance be placed on programs that addressed youth development, health care, energy conservation, human nutrition, and environmental quality. About one-fifth rate the following areas as greatly important: farm business and home safety, crop production, community service, family life and personal development, small small business, and farm management. Level of support ranged from a high percentage of 35%, who ranked youth development as a top priority, to a low percentage of 9% who supported home gardening. When the two response categories were combined, level of support ranged from a high percentage of 79%, who ranked youth development as a top priority, to a low percentage of 33% who supported home gardening. These percentages have been ranked in Table 13 to summarize the program priorities expressed by survey respondents.

Significant differences in responses and priority-setting across counties were found for a few program areas. For example, animal production was ranked very low by New Castle and Sussex County respondents, but generated more interest in Kent County. Leadership training received its highest ranking from Kent County respondents and its lowest ranking from New Castle County respondents. Environmental quality was ranked higher by both New Castle and Kent County respondents than by Sussex County respondents.

3. CONCLUSION AND RECOMMENDATIONS

The results of this study of Cooperative Extension in Delaware have demonstrated some findings that are consistent with the 1982 national study; other findings are mixed. For instance, there was a difference in the level of awareness of Cooperative Extension as an organizational entity and the level of awareness associated with each of the separate program areas. In Delaware, though, only the 4-H youth program was better known than the organization itself; in the national study, all the program areas were better known. Only in Sussex County was the organization better known than any of the separate programs, and the 4-H youth program was still the most recognized.

Compared to the national study, a lower percentage of respondents identified themselves as Extension clients (either ever having used or used services in the past year). Extension clientele in Delaware, as in the national study, were found to be predominately middle-class, although socio-economic characteristics

appear to be less influential at the county level than statewide. The under-representation of nonwhites as agency clients was found to be significant at all levels of analysis, regardless of how the client category was defined.

In both the national and Delaware studies, Extension clients were found to be highly satisfied with the services they had used; very few respondents actually expressed dissatisfaction; and a large portion of the general public felt they lacked adequate information from which to make a decision about any or all of Extension's four program areas. Respondents and/or clients have been generally less satisfied with community development programs than any of the other three (agriculture, home economics, or 4-H youth). In Delaware, the higher level of satisfaction expressed by Sussex County respondents disappeared when those respondents who indicated no definite opinion were eliminated from the analysis. If agency effectiveness is assessed in terms of public satisfaction, then Cooperative Extension has received a rating that indicates a better performance level than most other government agencies.

In the national study, nearly 90% of the population had heard of Extension programs, only 27% had used Extension services, but eight out of ten clients wanted Extension's level of funding or support to be at least as great as it is now. In the Delaware study, 80% of the population had heard of one or more of Extension's programs; only 21% had ever contacted Extension services, but nine out of ten respondents (both users and nonusers) wanted Extension's level of funding to be at least as great as it is now. Public support for the specific program areas varied only slightly; of those respondents offering opinions, the majority preferred increased support, the second largest group felt funding levels should remain the same, and the remaining small percentage indicated cuts should be made.

In summary, Extension evaluation studies have been prompted by concerns at either state or national levels about the changing character of American society, the impact that these changes have had or could have on Extension programs, and the desire to address such impacts in as constructive an approach as possible. As a community-based educational organization, Cooperative Extension has earned and maintained a well-recognized reputation as an effective public agency. In order for that reputation to be enhanced, however, future program planning efforts should be directed towards targeting services and reaching previously underserved groups. In addition, the possible development of a variety of new services not traditionally within Extension's mandate should be considered.