Evaluating the Unit Approach: FHD

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For most efficient use of staff time, should Extension personnel work with clientele on an individual basis or through large meetings and mass media? The Farm and Home Development program (FHD) utilizes a "family unit" or personal contact type approach to teaching management education to farm families. This report describes procedures used and results attained during the first 10 years of FHD in Wisconsin. Evaluation is made of results attained through use of small group teaching and intensive person-to-person contacts.

A DEBATE has been going on in Extension for some years. It centers on the most efficient use of staff time in working with clientele: Should staff work on a person-to-person, staff-to-family basis? Or should the focus be on working en masse, through large meetings, mass media, and workshops? On the basis of judgments that Extension may have committed too large a portion of its resources to mass contacts, an effort was inaugurated a few years ago to staff for more intensive individual work. The approach utilized a personal contact "family unit" approach and was labeled farm and home development (FHD).[1]

Designed to meet the need of farm families for management education, the program centered on working with both the farmer and his wife, considering family goals and the economic implications of farm adjustment and production alternatives. This report describes procedures used and results attained during the first ten years of FHD in Wisconsin. Data are primarily from 36 counties that carried the program most of the ten years, and were obtained from previous

[1] 83rd Congress, 2nd Session, *Federal Extension Appropriation Bill,* Public Law 690, 1954.

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research studies, annual reports of agents, and a questionnaire mailed to FHD agents in 1964.

Procedures

The basic goal for Wisconsin FHD was: "To teach the farm family involved to manage more effectively in light of its own needs, goals and resources."[2] Procedural guidelines were as follows:

1. To use Public Law 83 funds for hiring additional agents with major responsibility for farm and home development.
2. To work intensively with a specific number of farm families and to strive to enroll new cooperators each year.
3. To direct main efforts toward younger families just starting farming.
4. To enroll families having little or no previous extension contact.
5. To maintain a balanced program of beginning and advanced cooperators.
6. To reduce intensity of approach with families who have in the agent's view attained an understanding of management tools and procedures.
7. To place major emphasis on individual farm family visits supplemented by small group meetings.

Staffing

Beginning in 1954, additional agents with primary responsibility in FHD were hired at the county level.[3] At one time Wisconsin had 42 agents employed in 40 counties. These agents were originally supported nearly 100 per cent from state and federal funds. In 1964, there were 31 FHD agents, of whom 28 had major responsibility in farm management. Slightly above 90 per cent of these agents' salaries came from state and federal sources, about 10 per cent from counties.

The state Extension Service has charged the FHD agents to devote most of their efforts to FHD. A 1959 survey revealed that agents spent 76.5 per cent of their total work time on FHD. As

[2] *Farm and Home Development and Its Place within the Cooperative Extension Service in Wisconsin* (Madison: University of Wisconsin, Cooperative Extension Service, January, 1962), p. 2.

[3] In 1963 the official title of Wisconsin Farm and Home Development Agent was changed to Farm Management Agent. Agents felt the new title provided a clearer description of their educational work and was better understood by lay people. To avoid confusion with the original title, however, the title of Farm Management Agent will not be used in this study.

time went on, agents increasingly accepted responsibility for major extension projects in the county.[4] In 1964, three-fourths of the FHD agents reported devoting 60 per cent or more of their time to FHD activities. The height of these activities was concentrated in the months January-March, when agents devoted 81.9 per cent of their time to FHD. During this period, emphasis was given to end-of-year summary and analysis of records and to making farm adjustment plans and expenditure plans for the year ahead. Agents were also less committed to other extension activities during this period. The summer months, July through September, had least FHD activity, with agents devoting only 50.5 per cent of their time to FHD. In this period, farmers spent longer hours in the field while agents were more heavily committed to other extension activities.

Approximately 90 per cent of the time spent on FHD was devoted to farm management, 10 per cent to home management. Indications are that the amount of time each agent devotes to FHD is strongly influenced at the local level. Possible reasons for this are the policy of the county agricultural committee, local extension staff policy, and priorities set by individual FHD agents.

Agents other than FHD agents are highly committed to their own programs and responsibilities and spend relatively little of their total time on FHD activities. Only about 10 per cent of the home agents and 17 per cent of the agricultural agents devote 10 per cent or more of their time to FHD. Thus, almost the entire load for the FHD program is carried by the FHD agent, while he devotes over a third of his time to other extension activities.

Cooperators

Agents work with two groups of people: regular cooperators and special problem cooperators. Regular cooperators are families who are assisted rather intensively for two to four years, depending upon their needs. Special problem cooperators are families helped on a limited basis with specific problems such as major farm building projects or farm credit. Agents assist the families in analysis and planning of alternative solutions. Special problem cooperators are usually worked with for less than a year, though some eventually become regular cooperators.

Since the early days of FHD, agents have worked with from 3000 to almost 5000 families annually. Since 1957, the number of FHD agents has declined, though the total number of families worked with each year has been rising. Table 1 shows that the

[4] *Farm and Home Development . . . , op. cit.*, p. 8.

number of regular cooperators has leveled off recently, while the number of special problem cooperators continues to increase.

Table 1. Number of families reached by farm and home development in Wisconsin.

Year	Regular cooperators	Special problem cooperators	Annual reported total
1954	143	Not reported	143
1956	1,608	Not reported	1,608
1958	2,597	1,130	3,727
1960	2,802	1,365	4,167
1962	2,990	1,648	4,638
1963	2,992	1,718	4,710

Age of Farm Families

The FHD program has been aimed primarily at beginning farmers. During the first five years, the mean age of FHD cooperators was 37.2 years, nearly 12 years younger than the average age (48.8) of all Wisconsin farmers.[5] In 1963, FHD agents reported that they still especially invite farm couples between the ages of 20 and 35 to their management meetings.

In 1959, 72,512 commercial farms in Wisconsin grossed $5000 or more income per farm. This was an increase of 22 per cent over the number of such farms reported in 1954. During 1954-59, mean enrollment of new FHD cooperators in the 36 FHD counties was 15.5 annually, about 7 less than the average number of starting farmers per county.[6]

Previous Extension Contact

In the early years of FHD, a substantial effort was made to reach new families. At the beginning, over 40 per cent of the families worked with had little or no previous extension contact. This proportion has declined in recent years but still exceeds 20 per cent of all families reached by FHD.

Length of Participation

The educational objective of FHD was to assist families in attaining an improved level of management ability, and then to trans-

[5] C. Sargent, "The Nature and Extent of Farm Family Participation in Farm and Home Development in Wisconsin" (unpublished M.S. thesis, University of Wisconsin, Madison, Wisconsin, 1960), p. 56.

[6] *Census of Agriculture,* Vol. II, ch. II, Table 19, 1959.

fer agent efforts to other families desiring this special assistance.[7] Although the state goal was to work with regular cooperators for three years, agents reported working from two to five years per family, or an average of slightly longer than three years. This longer working period was in part due to individual family interest and need, agent turnover, and delayed family progress.

In terminating intensive work with a family, 87.5 per cent of the agents reported considering the family's management ability. This involved appraising the family's ability to solve management problems with the help of analyses and budgeting techniques which the agent attempted to teach. Agents commonly made shorter and less frequent visits as the need for their assistance declined.

In a recent survey, nearly half the agents felt that three years or less was sufficient for family participation; almost one-fourth felt that families needed three to four years; and one-fifth felt a need to work with families for four to five years.

In 1958, agents terminated intensive FHD work at the rate of 22 per cent per year. In 1963, the termination rate was 32 per cent. This may have been influenced by the agents' increasing load of special problem cooperators and by increased pressure to take other extension responsibilities.

Teaching Approaches

Two major teaching approaches are used by agents in carrying out farm and home development—farm visits and small group meetings.

About 83 per cent of the agents spend 60 per cent or more of their time making farm visits. Visit time ranges from one-fourth hour to three hours per visit, with an average of 4.5 visits per year during the first four years of participation. In the early years of FHD, the number of annual visits increased progressively during each of the first three years. In 1964, however, agents reported the highest number of farm visits in the first year that a family participated in FHD, with fewer visits in each succeeding year.

In 1959, agents spent a mean total of 35.3 hours per family. In 1964, this figure was reduced to 31 hours per family. Agents reported increased effort to plan the specific purpose of each visit in order to improve their efficiency in use of farm visit time.

The second major method of carrying out FHD is the use of small group meetings. Each meeting series consists of five or six sessions where families sharpen management skills through a step-by-

[7] *Farm and Home Development . . . , op. cit.,* pp. 2-3.

step process which includes: (1) setting of goals, (2) evaluating each family's resource potential and pinpointing problems in their business, (3) weighing alternatives for improving income, (4) planning ways to get the most from family living expenditures, (5) appraising long-run family insurance needs, and (6) preparing a money plan for the year ahead.[8]

Agents have short lecture periods followed by group discussion, with each family working on its own farm situation. These sessions concentrate a large proportion of the management education process into a short period, allowing agents to work with more families each year. Counties holding small group meetings average two series per year with a mean of 5.3 meetings per series. Group size ranges from 8 to 18 participants. Agents make follow-up visits to 90 per cent of these families to work on their specific situations.

Most agents have found these series of small group meetings to be an effective tool for teaching management; 72 per cent plan to continue or increase use of the meetings. Several agents reported that more people can be reached for the time spent on this type of contact, and subject matter can often be more effectively taught in groups than by individual farm visits.

Results of Farm and Home Development

A comprehensive study was made of the first five years of FHD, using two participator groups and two control groups.[9] This study furnished considerable evidence that FHD significantly influenced the adoption of several improved farming practices in Wisconsin. In 13 of 15 comparisons made between participator and control groups, the participators made greater average gains in such factors as farm size, crop acres, number of dairy cows, and total milk production. The differences between participator and control changes over the measurement periods were not extremely large, but did indicate that participating groups were expanding the size and strength of farming operations faster than were control groups.

Second Five Years of FHD

No comprehensive controlled studies were made during the second five years of FHD in Wisconsin. However, agents continued to

[8] Data from questionnaire on small group management meetings were compiled by R. E. Rieck, University of Wisconsin, Madison, Wisconsin, October, 1963.

[9] D. E. Johnson and E. A. Wilkening, *Five Years of Farm and Home Development in Wisconsin,* Res. Bul. 228 (Madison: University of Wisconsin, Department of Rural Sociology and Cooperative Extension Service, June, 1961).

summarize progress made by participants. Selected measures of financial changes and farm improvements of regular cooperators were kept by FHD agents for two to three year periods.

FHD cooperators still appeared to make greater financial gains than did noncooperators operating similar size farms. For example, USDA costs-and-returns studies revealed that during the early 1960's, typical Wisconsin dairy farms made little financial progress except during 1960-61, when they showed growth in net farm income. During this same time, FHD cooperators increased gross farm income from $1000 to $2000 per year. Agent reports from detailed farm records further showed that cooperators often achieved $500 to $1000 per farm higher net cash incomes yearly.[10]

The results obtained through management education in one Wisconsin county where FHD was actively carried out shows relatively high financial progress by small-volume operators (Table 2). Similar results have been reported in other counties.

Table 2. Changes made by 18 farm and home development cooperators in Polk County, Wisconsin, 1959 to 1963.

Items	1959	1961	1963	Change 1959–63
Crop acres	104.1	113.2	129.2	+25.1
Average no. cows per year	23.3	28.7	31.0	+ 7.7
No. livestock units	38.4	43.0	52.7	+14.3
Total cash income	$10,396	$12,870	$14,961	+$4,565
Total cash operating expenses	5,702	7,210	7,922	+2,220
Net cash income	4,687	5,860	7,099	+2,412
Net cash as per cent of gross sales	45.1	45.3	47.4	+2.3
Per cent increase in net income	—	25.0	21.1	+51.5

Changes in Decision-Making Ability

FHD families have commonly made greater financial progress than the average made by all Wisconsin farm families. This may in part be explained by better decision making. If this is true, is it due to the farmer's confidence in the agent's advice, or is the farmer improving in his own decision-making ability?

A study reported in 1960 compared the decision-making ability

[10] *Farm Costs and Returns: Commercial Farms by Type, Size, and Location,* Agricultural Information Bulletin 230 (Washington, D.C.: USDA, Economic Research Service, June, 1964), Tables 11-12, and reports submitted by FHD agents, 1961-62 and 1963. FHD agent reports represented 10-15 per cent of the total FHD regular cooperators and were compiled into state summaries.

of FHD operators and a matched control sample.[11] These participators and nonparticipators had similar education, gross farm income, farm tenure status, and membership in farm organizations at the start of FHD participation. It was found that FHD participants improved their decision-making ability more, were more fully oriented to goals, had greater knowledge of farm records and technical farm practices, and indicated a keener ability to analyze the economic aspects of typical farm decisions than did the controls.

Family Progress Related to Intensity of Approach

A study was made of the intensity of approach used by agents working with farm families.[12] The "very intensive" approach involve the whole farm approach to problem solving, relating both the farm and family units. Decision making was taught by example and as a skill. Agents assisted families in identifying long-term goals, with complete farm and home analysis and planning. The "nonintensive" approach consisted mainly of teaching unrelated practices, providing general information without analysis and planning.

Families receiving the very intensive approach adopted the most improved farm practices and increased their income slightly over $1000 per family during FHD participation. Those receiving the nonintensive approach increased net cash income $120 per farm and adopted the lowest number of improved farm practices. These results provide some evidence that farmers who received most assistance from agents achieved the most progress.

The expanding number of special problem cooperators reflects an increasing demand for the services of the FHD agent. However, special problem cooperators generally receive a much less intensive approach than do regular cooperators. They often have less complete records, which creates greater problems in following whatever changes or progress families may make as a result of this help.

Implications

The FHD approach in Wisconsin followed the intent of Public Law 83 to intensify management education for farm people. This approach was implemented on a rotational basis such that each family participated for two to four years. However, other farmers

[11] R. E. Rieck and G. C. Pulver, *Empirical Measure of Decision Making in Evaluating Farm and Home Development in Wisconsin*, Res. Bul. 238 (Madison: University of Wisconsin, Department of Agricultural Economics and Cooperative Extension Service, June, 1962).

[12] Sargent, *op cit.*, p. 122.

put increasing demands on agents for help with special management problems, not necessarily involving continued contact.

Future management educational programs for farmers should permit considerable flexibility in working directly with farmers on a special problem basis. The need for flexibility is likely to increase as the farm clientele becomes more diverse in such factors as farm size, educational level, degree of specialization, and methods of acquiring and transferring property. On the one hand, highly-specialized, aggressive, well-educated farmers generally take the initiative to seek out answers to management problems—requiring little follow-up help in using the information. On the other hand, low-income or poorly-motivated farmers may require substantial follow-up help not only on using the information but in being stimulated with the desire to change.

Evidence that more intensive contact with farmers results in greater change suggests that major educational program objectives will likely continue to necessitate a high input of the educator's time in order to achieve substantive results.

The length of intensive phases of educational programs will vary, as will the approach. Group teaching improves efficiency of agents' use of time, but may ignore differences in individual learning capacities or needs. Extension teachers should continually be alert to recognize differences between individuals in their capacity to learn in group and individual learning situations.

Does the original FHD approach have renewed application for work with low-income families?

Management education for agriculture-related industries, such as farm credit, farm supply, and marketing firms offers expanding opportunities for "wholesaling" our educational efforts. These clientele are highly important, but they can further supplement extension efforts by taking information directly to farmers.

FHD agents emphasized the need for continued management and technical training for themselves and also for all extension workers who deal with agriculture. The agents felt that even those who do not have designated responsibility for management education should recognize the economic aspects of farmers' problems.

Management training for all agricultural agents is particularly important where neither county nor area (multi-county) management agents are available.