

Table 3 shows that about 92 percent of the students responding indicated that they would like to go back to the farm even though they did not currently plan to. This table also shows that being independent or "own boss" ranked first as the reason for preferring farming. Enjoyment or interest in farming ranked second; and "being outdoors," personal satisfaction, and "a challenge" ranked about even for third place.

Concluding Statement

Data from surveys of students in farm management classes showed that a large number of students planned to go back to the farm. The majority of those going back to the farm indicated that they planned to combine farming with a farm related job. The desire to farm was very strong among the respondents since they indicated a willingness to give up a considerable amount of money to remain on the farm. A strong interest in farming was also indicated by the fact that most of the students said they wanted to go back to the farm even though they did not plan to do so at the time of the survey. Finally, being independent and the enjoyment of farming were the main reasons given for preferring farming over a non-farm job.

Public policies and programs for agriculture, general economic policy, and college of agriculture curriculums should take into account the preferences expressed in this study. Although these results are from a fairly small sample they suggest that with reasonable monetary rewards and proper training the quantity and quality of managerial resources in farming could be substantial. Other studies should be made to see if these results can be extrapolated to students in other colleges of agriculture. If these results were true for other student populations then we could be assured that the quantity and quality of managerial resources needed in farming would be forthcoming.

References

1. Beale, C. L. and K. G. Shoemaker. 1961. "Adjustments in Rural Human Resources," *Adjustments in Agriculture - A National Basebook*, C. T. Christian, Editor. Iowa State University Press, Ames, Iowa.
2. Brannen, Stephen J. 1968. "Structural Change of the Individual Farm." article in *The Structure of Southern Farms of the Future*. Agricultural Policy Institute, Raleigh, N.C.
3. Halcrow, Harold G. 1977. *Food Policy for America*. McGraw-Hill Co.
4. Nesius, Ernest, Jr. 1959. "Opportunities and Limitations in Programs for Younger, More Flexible Persons Now in Agriculture," Chapter 20 in *Problems and Policies of American Agriculture*, Iowa State University Press.

Urban Agriculture

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Abstract

The training of students in urban agriculture at Colleges of Agriculture may be a worthy venture, with the goal of improving the quality of life in the city. Urbanization throughout the world continues to increase at a rate twice that of the growth of the world population, creating enormous difficulties. The potential of producing food within the city may be sufficient to improve significantly the diet of the city dweller, thereby countering the problem of malnutrition and its associated social aspects. But in order to train students to bring the farm to the city research and practical experience are needed before courses can be offered and faculty made ready to teach.

The influx of students from the city into our colleges of agriculture has caused much concern, as these colleges are in the midst of a student interest boom with no end in sight (1). Increasing student interest in agriculture may be prompted by ecological concerns as well as by recent emphasis on future world food needs of an expanding world population. There may be an increasingly important alternative to the conventional farm oriented careers in agriculture for students with urban backgrounds; they may bring the "farm" to the city. Many people living in cities and their suburbs have had an interest in plants as witnessed by the boom in home gardening and house plants in recent years. The question is, can this interest in plants and ability to grow them be cultivated to provide nourishing food. Some think so, for the Washington, D. C. based Institute of Local Self-Reliance has coined the term "Urban Agriculture" to apply to activities designed to improve the plight of the city dweller by providing food and beauty from plants.

With urbanization currently occurring at twice the rate of the increase in the world population, cities are becoming crowded, dirty, with high crime and disease rates and high unemployment. In fact, many in cities are undernourished.

The recent boom in home gardening in this country has added \$14 billion to the food supply and resulted in a significant increase in the consumption of fruits and vegetables (2). Nutritionists rate the lack of adequate inclusion of fruits and vegetables in the diet as a major cause of malnutrition (3). If home gardening can be brought to the innercity, its impact on the diet of the innercity dweller might be significant.

To stimulate interest in home gardening, particularly among the poor and elderly in 16 of the larger cities in the United States, \$3 million was provided by the Federal Government in 1978 to develop community gardening projects (4). A composting and gardening project

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in the Bronx in New York City is a good example of what is being done in the innercity with the hope of greening 500 devastated acres. (5). However, the aim of all these reported activities has been to develop projects and interests with little or no effort to evaluate the potential of the scientific approach to the production of significant quantities of food which could make a real impact on the diet as well as provide significant employment opportunities. There has been no effort to apply farm technology to this untaking or to enlist the aid of Colleges of Agriculture other than that which may be requested from the Cooperative Extension Services through county agents or state extension specialists. But many of these trained agents may have difficulty applying their skills to the rigorous requirements of an urban environment.

What Role?

Therefore, what role should colleges of agriculture play in preparing students to raise food in an urban environment? The typical college of agriculture curriculum provides few, if any, courses designed to instruct students in methods of coping with harsh city environments. The traditional courses in animal and crop production, food science, and even in horticulture focus on rural large scale farming, animal handling, greenhouse and ornamental management, and food processing. Courses in agricultural economics and engineering, plant pathology, and entomology normally cover only the typical farm aspects of the subject matter.

Courses on the production of animals and plants on roof tops, plants on patios and in small containers, or raising animals in confined urban environments are almost non-existent. Also, persons who have studied the social and economic stresses created by urbanization have never considered urban agriculture — the production of food in the city — as a means of solving some of the problems that face most city dwellers (6).

What might be the curriculum outline for a student majoring in urban agriculture? The basic and traditional courses are still essential: English, history, chemistry, math, physics, biology and the social sciences. The usual advanced courses are equally important: soils, plant pathology, entomology and botany. After completing the basic requirements, the student faced the problem of finding courses to help him translate this knowledge to the urban setting. Here the lack of a developed technology and trained and experienced faculty is a major problem. There isn't a developed or developing technology on the subject of urban agriculture to present to students. Although there is much written on home gardening and the like, it is doubtful that much of this material would be more than just helpful.

It may be worthwhile for colleges of agriculture, particularly those in the northeastern United States, to investigate seriously this new aspect of agriculture. Many of these colleges are having difficulty justifying their research budgets due to the decline in farming and farm

income in their area. Legislators may be more ready to supporting research that focuses on urban agriculture as a source of food and employment which could significantly improve life in the city.

Since urbanization is a world wide problem, research findings and the training of students in urban agriculture could do much to improve the lot of the city dweller in all parts of the world.

References

1. Anderson, M. R. and D. M. Elkins. 1978. Urban students in agriculture — disadvantaged? *NACTA Jour.* 12(2):4-6.
2. Annual Gallup Poll on Home Gardening. Available from **Gardens for All**, Shelburne, Vermont 05482, \$25.00.
3. White, Philip. 1978. Challenge of the future: Nutritional quality of fruits and vegetables. *ASHS Abstracts*, p. 42 paper no. 141, Boston, Mass.
4. Stokes, Bruce. 1978. Urban gardens are great fun, with a few precautions. *The Christian Science Monitor*, Friday July 7, p. 14.
5. Morehouse III, Ward. 1978. How the Bronx is turning vacant lots into garden spots. *The Christian Science Monitor*, Monday, July 3, p. 15.
6. Personal communications. 1978. Dr. David Caputo, Purdue University, West Lafayette, Indiana.

NACTA Invitational Judging Conference Set for Crookston on April 27-28, 1979

The University of Minnesota Technical College at Crookston, Minnesota is hosting the 1979 NACTA Invitational Judging Conference April 27 and 28. Contests will include general livestock, dairy, horses, crops and soils.

The NACTA Invitational Judging Conference is composed of non-land grant colleges, junior colleges, post secondary technical schools, and schools in the United States and agricultural colleges in Canada that are interested in promoting agricultural judging skills. In addition, it offers an excellent opportunity for students and coaches to visit other colleges and universities offering programs in agriculture.

The conference will include two-year and four-year divisions in each of the contests. A \$20.00 registration fee covers all contests.

For additional details write the Agriculture Division, University of Minnesota Technical College, Crookston, MN 56716i.