

TEACHING, RESEARCH, AND EXTENSION PROGRAMS AT PREDOMINANTLY BLACK LAND-GRANT INSTITUTIONS

Thomas T. Williams and Handy
Williamson, Jr.

Seventeen universities of higher learning comprise the historically black colleges known as the "1890 Land-Grant Universities and Tuskegee Institute." Most of these universities have had an arduous struggle to survive and a strenuous effort to gain professional respectability within the Land-Grant System.

The history of these universities is an evolution that started with the freeing of slaves. In a recent publication by Thomas T. Williams (1979), seven senior scholars presented their views on the evolution of the three land-grant functions—teaching, research, and extension at the 1890 Land-Grant Institutions. The insights gleaned from these individual writings serve as the foundation for this paper.

This paper will present the case for the historically black land-grant universities from two perspectives: (1) the historical evolution of the land-grant functions, and (2) the future thrust of these institutions. Woven throughout the paper will be implications for international development.

This paper will not have as its focus the negative aspects of the struggle for existence of the 1890 Land-Grant Universities and Tuskegee Institute. The authors take the position that no attempts can erase the drama which evolved through the legacy of slavery, economic injustices, and social inequities of blacks in America. The history of the 1890 Land-Grant Universities is part of the record of black Americans' struggle for equality. That record is the story of destroyed dreams and abandoned hopes. It is the story of courage of a people against seemingly insurmountable odds. It is the history of a race which refused to let hope be squashed by intoler-

ance and who maintained a relentless dedication to moral and ethical principles.

EVOLUTION OF THE HISTORICALLY BLACK LAND-GRANT UNIVERSITIES

The Civil War years were the single most important years leading to creation of conditions favorable for the establishment, growth, and development of educational institutions for blacks in the Southern States. The end of the war marked the close of the 240-year era (1619 to 1863) during which time blacks were held in slavery. This was an era in which it was considered a criminal offense to instruct blacks in any but the most rudimentary of domestic skills. The close of the War not only marked the end of the oppressive and dehumanizing experiences of slavery, but also the dawn of a new day in social, economic, and political power for the freed black people.

As a consequence of the War, it was determined that the United States would remain an undivided nation and blacks would no longer be slaves. There was a third question of equal importance which remained to be answered: What would be the place of the nearly 4,000,000 blacks for whom freedom had been won? Although the answer to this question is multifaceted, involving all areas of social and economic well-being of a people, only the area of education will be considered.

The South was already aware of the significance of education in a free society. Educational institutions had been established for white youths as early as 1794 in Tennessee, 1801 in South Carolina, 1833 in Delaware, 1839 in Missouri, 1853 in Florida, and 1860 in Louisiana.

Thomas T. Williams is Director, Human Resources Development Center, Tuskegee Institute and Handy Williamson, Jr. is Director, Cooperative Agricultural Research Program, Tennessee State University.

Invited paper presented at the annual meeting of the Southern Agricultural Economics Association, Biloxi, Mississippi, February 3-6, 1985. Invited papers are routinely published in the July *SJAE* without editorial council review but with review of the copy editor (as per Executive Committee action June 25, 1982).

TABLE 1. DATES 1890 INSTITUTIONS WERE FOUNDED AND SPONSORING AGENCY, 1979

Date	Name	Sponsor
1866	Lincoln University	Civil War Negro Infantry Men
1871	Alcorn State University	State Legislature
1872	South Carolina State University	State Legislature
1873	University of Arkansas, Pine Bluff	State Legislature
1875	Alabama A & M University	Group of Ex-Slaves
1876	Prairie View A & M University	State Legislature
1880	Southern University	State Legislature
1881	Tuskegee Institute	State Legislature
1882	Virginia State University	State Legislature
1886	Kentucky State University	State Legislature
1887	Florida A & M University	State Legislature
1891	Delaware State College	State Legislature
1895	Fort Valley State College	Citizens' Group
1897	Langston University	Territorial Legislature
1909	Tennessee State University	State Legislature

Source: Williams (1979), p.40.

In 1862, the United States Congress passed the first Morrill Act which provided for establishment of a land-grant institution in each state to educate citizens in the fields of agriculture, home economics, the mechanic arts, and other useful professions. In the South, under the premise of legal separation of the races, blacks were not permitted to attend the institutions first established under the Morrill Act of 1862. Although the law did provide for separate but equal facilities, only Mississippi and Kentucky established institutions for blacks under the first Morrill Act, and only Alcorn University was designated "Land-Grant."

During the quarter century following the Civil War, the majority of the Southern States established under a variety of sponsorships—mainly state legislature—institutions on the order of the land-grant type, but designated mainly "to train Negro or Black teachers."

Even with the enactment of the Morrill Act of 1862, the Federal government was unable to gain cooperation from the Southern States in the provision of land-grant support to the black institutions. To overcome this problem, a second Morrill Act was passed in 1890 specifically to support the black land-grant institutions. Thus, the black land-grant institutions are referred to today as "The 1890 Institutions." Those Southern States which did not have black institutions by 1890 each established one later under this Act, Table 1.

Tuskegee Institute was created by an Act of the Alabama Legislature; however, 12 years later, the State established and incorporated a Board of Trustees and named the school private. Thus, it is not a land-grant college, in spite of the fact that it was granted 25,000 acres of the land by the United States Congress in 1899.

In the early years of the black institutions, there was essentially no commonality with respect to either the content or the level of program offerings. The academic programs at these institutions were variously described as elementary, secondary, normal, and general education, with a few indicating agriculture, home economics, and the mechanic arts. The most common purpose of these institutions by the turn of the century was for "the training of black teachers."

Although most of the black land-grant schools were established in the 25 years following the Civil War, their growth and development was prohibited by the lack of available resources. In studying the evolution of these institutions, it should be noted that there is no correlation between age and development, nor is there correlation between the rate of growth of the 1890 and the 1862 institutions in a given state.

Some indications of the evolution process of the 1890 Land-Grant Universities are presented in Table 2. The three highlighted are: (1) time required from establishment to qualifying to offer a 4-year degree, (2) time required to offer graduate training, and (3) time required to achieve regional accreditation.

It is obvious that the 1890 Land-Grant Institutions evolved in several directions. However, today, these institutions have the research capabilities, faculty expertise, and "grantsmanship" to maintain well-coordinated and viable teaching, research and extension programs. Commitment to the basic land-grant functions and dedication to scholarly competency of these institutions, coupled with the methods by which research findings have been applied to solve pressing problems and to meet human needs, have

Table 2. Dates 1890 LAND-GRANT INSTITUTIONS WERE FOUNDED, INITIATED 4-YEAR AND GRADUATE PROGRAMS, AND ACHIEVED REGIONAL ACCREDITATION, 1979

Institution	Founded	Initiated 4-year program	Initiated graduate program	Achieved regional accreditation
		Year		
Alabama A & M University	1875	1939	1958	1963
Alcorn State University	1871	1871	1975	1961
University of Arkansas, Pine Bluff	1873	1929	a	1933
Delaware State College	1891	1947	a	1957
Florida A & M University	1887	1909	1951	1949
Fort Valley State University	1895	1945	1957	1957
Kentucky State University	1886	1929	1972	1939
Langston University	1897	1897	a	1939
Lincoln University	1866	1935	1940	1935
University of Maryland, Eastern Shores	1886	1936	1978	1953
North Carolina A & T University	1891	1925	1939	1936
Prairie View A & M University	1876	1901	1954	1958
South Carolina State College	1872	1924	1948	1960
Southern University	1880	1922	1957	1958
Tennessee State University	1909	1922	1942	1946
Tuskegee Institute	1881	1928	1943	1933
Virginia State College	1882	1943	1937	1933

*Not applicable.

Source: Williams (1979), p.42.

given the 1890 Land-Grant Institutions a unique history.

Federal Legislation and the Historically Black Land-Grant Colleges

The 1890 Morrill Act was a significant piece of legislation for those who sought to enhance the educational development of blacks. The expressed condition of the Act was for equitable division in funds between the black and white land-grant colleges. However, though it created policies that expanded educational opportunities for black Americans, it did not ensure equal opportunity or equalization of educational funding for blacks. It was unfortunate that the 1890 Morrill Act did not explicitly require equitable divisions of the 1862 endowment income or for funds under the Hatch Act of 1887 which had allocated funds for land-grant colleges to establish experiment stations for research. The 1890 schools were truly federal institutions in their early years, depending totally in some states on Morrill funds and philanthropic contributions.

Throughout the first half of this century, state and federal support of black educational institutions continued to be flagrantly inadequate. Federal land-grant legislation, with the exception of the Nelson Amendment of 1907 and the Bankhead-Jones Act of 1935, virtually ignored the 1890 Land-Grant Institutions. Most legislation was primarily supplementary to the earlier acts and provided

mainly for research facilities at the white or 1862 Land-Grant Institutions.

None of the 1890 Land-Grant Institutions were included in the research programs. Two pieces of legislation, the Adams (1906) and Purnell Acts (1925), provided the funding sufficiency for engaging the black land-grant institutions in research and experimentation. However, government officials ignored this, thus thwarting the development of black institutions, black communities, and the southern region as a whole.

Though monies for agricultural research were not forthcoming, the Nelson Amendment of 1907 which supplemented the two Morrill Acts provided monies for this purpose. This amendment had another distinctive feature in that it designated a part of the funds for the special preparation of teachers of agricultural and mechanical arts.

Great strides were made by black leaders in the establishment of secondary schools with philanthropic monies matched with public funds. In spite of the success of these philanthropic strategies, it was not until passage of the Bankhead-Jones Act of 1935 that requirements for "equitable distribution" were included. Though the Smith-Lever Act of 1914 was designed to provide funds for extension services, the black land-grant schools were not supported. Finally in 1972, a modest level of funding was made available.

One hundred years passed between the founding of the first black land-grant university (Lincoln University-1866) and receipt of anything approximating hard money for

research. In 1967, the black colleges received \$283,000 in monies for research under Public Law 89-106. Ten years later, the Food and Agriculture Act (PL-9513) carried authorization for the appropriation of a reasonably enhanced level of funding for both extension and research. This was primarily in the form of grants on a year-to-year basis.

The most significant change in the funding structure was triggered by the Food and Agriculture Act of 1981 wherein the funding level was increased through annual appropriations rather than grants. Passage of the 1981 Food and Agriculture Act set the stage for enhancing the role(s) of the 1890 institutions as participants in America's food and agricultural research system. It has long been realized that these institutions have played and continue to play a vital role in the American agricultural research, teaching, extension, and international development arenas. But, until recent years, the role has been played with less than adequate resources and less than serious consideration. Thanks to actions of the U.S. Congress and the executive branch of government, changes are gradually being realized.

Several features of the Food and Agriculture Act have already begun to have an impact on many aspects of agricultural research at the 1890 Land-Grant Institutions. Other features of the Act promise positive results, provided that there is continuity beyond 1985. Those features will be listed and followed with summary explanations from the authors' point of view.

INCREASED AND EXPANDED REPRESENTATION ON THE JOINT COUNCIL TO ENSURE REGIONAL DIFFERENCES AND EMBRACE VIEWS OF OTHER AGRICULTURAL INSTITUTIONS

Appointment of representatives of 1890 Research and Extension Programs to the Joint Council significantly enhances active involvement in planning and coordination at the national level. Involvement in the activities of the Council allows the 1890 Institutions to bring to bear a significant point of view on activities such as long-range planning, the annual priorities reports, the needs assessment, and the annual accomplishment reports. Tangent to representation on the Joint Council is the enhanced involvement in the regional bodies that contribute theoretically

to the Joint Council. Apart from being a representational perspective to the Joint Council, it is felt that an important outcome is the infusion of planning approaches and concepts from the national level back into the institutions. Additionally, involvement in planning and priority setting gives rise to a better understanding of periodic shifts in national research priorities, and sets the tone for making programmatic shifts at the institutional level.

APPOINTMENT OF AN ASSISTANT SECRETARY TO UPGRADE RESEARCH PRIORITY

Appointment of an Assistant Secretary of Agriculture for Science and Education greatly enhances the agricultural research and development system. His involvement as Chairman of the Joint Council allows the 1890's, as well as others, to be knowledgeable of the Administration's views regarding the nation's agricultural research priorities and programs. This particular feature is significant, especially since the incumbent Assistant Secretary has sought to gain input from 1890 institutions, not only through the Joint Council, but also through other forums and work groups designed to improve planning and coordination.

ENHANCED RESEARCH FUNDING AT CERTAIN HISTORICAL INSTITUTIONS

Subsequent to passage of the 1981 Act, there has been realized an increased share of the agricultural cooperative extension funding at the 1890 Institutions. On the research side, the bill provided for an annual appropriated funding level of not less than 15 percent of the total appropriations for the Hatch program. The unique feature of this component of the Bill is that the shift from grants to appropriation carries a greater degree of year-to-year flexibility. Most significant is that funds appropriated under the 1981 Act can be used for administrative planning and direction, purchase and rental of land, and the construction, acquisition, and retrofitting of buildings. The 1890 Institutions will be able to combine the impacts of formula funding and of the special facilities grant to significantly improve research facilities. In a short time the results of enhanced

funding will be realized not only in terms of an improved research environment, but in markedly enhanced contributions from the 1890 Institutions to the overall national agricultural research system.

AUTHORIZATION OF THE INTERNATIONAL DAIRY GOAT RESEARCH CENTER AT PRAIRIE VIEW A & M UNIVERSITY

Over the past 3 years, Prairie View has been able to plan and build needed facilities and purchase necessary equipment for dairy goat research. After receiving the foundation animals in 1982, long-term research projects on dairy goats were begun. The need for more research and literature on dairy goats emerged as the number of goats and goat owners increased. Research has been conducted in other countries, but a shortage of tested, practical management research on dairy goats exists for tropical and semitropical areas of America. Were it not for the support authorized in the 1981 Farm Bill, Prairie View A & M University could not boast of its recent progress in the Dairy Goat Research Center.

OVERALL LONG-RANGE PLANNING AND REQUIRED STUDIES

The requirement for improved coordination and for completion of long range plans and certain studies can only serve to improve the workings of the agricultural research and education system. The requirement for broadened representation in the efforts mentioned ensures that the process is sensitive to the roles of the various partners in the system. Involvement of the 1890's in the planning process and in implementation of initiatives have and will continue to have positive results. First of all, the legislation authorizing these institutions' involvement sends a signal that the Congress recognizes and expects significant contributions from these institutions. Second, through involvement of the 1890's, it can be ensured that the segment of American society represented by these institutions will be represented as policies are made regarding the nation's food and agricultural research system. Third, the involvement is instructive and it will allow for planning models, framework, and issues to be integrated at the institutional level.

The past wisdom and actions of the U.S. Congress have brought the 1890 Land-Grant Universities to a status of recognized participation in the nation's agricultural sciences and educational system. Progress towards this finally realized position has been slow. There is continuous need to recite the historical facts that gave rise to the 1890 Institutions, to be sure that they are always vividly clear in the minds of public officials. It is or should be clear that the need for the continued development of the 1890's is strong and growing in this great society of ours. Congress is to be commended for its collective wisdom and sensitivity in framing those measures in the Food and Agriculture Act of 1981 and in similar legislation in prior years which fostered participation by 1890 Institutions.

The Agricultural Mission of the Historically Black Land-Grant Institutions

The basic mission of the historically black land-grant institutions is to provide access to higher education for their clientele, without regard to race, creed, religion, or socioeconomic circumstance. In addition, however, these institutions possess unique expertise in "reaching the unreached."

Although these institutions are committed to racial integration, they still provide meaningful points of access and often better odds for retention and attainment for blacks than are evident in other institutions. In addition to making distinctive contributions to their respective student groups, they also provide cultural and educational support to the wider black community. In so doing, they enhance the fabric and scope of life for many blacks, while contributing to an overall cultural and educational diversity in American higher education.

While the historically black public colleges have not been racially exclusive in their admissions policies, they nevertheless have continued to enroll principally blacks. In this regard, they have been the training ground for black agricultural scientists, architects, educators, engineers, lawyers, nurses, veterinarians, and other professionals who in turn have rendered valuable service to their states, regions, and the Nation.

From humble and limited resource beginnings, the historically black land-grant institutions have evolved into a major national

educational resource for: (1) resident instruction, (2) agricultural research, (3) cooperative extension, (4) human resource and rural community development, and (5) international development.

In recent years, a significant amount of federal support has been provided for research and extension. Funds for involvement in international development are available at unprecedented levels. The net result has been the development on these campuses of comprehensive high levels of sophisticated scientific and professional research in both basic and applied forms. As a consequence of the growth and development of the historically black land-grant institutions, they are now providing technical assistance to developing nations in Asia, Africa, the Caribbean, and South America, either individually or as members of consortia.

In 1978-79, 35 historically black institutions, of which 16 are land-grant colleges, enrolled 130,265 students of all races. They awarded 14,559 baccalaureate and 3,847 graduate and professional degrees that year. The public black colleges enroll nearly 25 percent of all black students in higher education, and more than 60 percent of all students enrolled in predominantly black colleges.

THE NEED TO FOCUS FUTURE PROGRAMS IN TEACHING, RESEARCH, AND EXTENSION AT PREDOMINANTLY BLACK LAND-GRANT INSTITUTIONS AND TUSKEGEE INSTITUTE

We have been charged with the responsibility of looking at the future of the Land-Grant System in the areas of teaching, research, and extension. In this effort, we will offer some observations discerned from our years of working at the predominately black land-grant universities. For this section of the paper, we have taken the "provocative approach" to couching our remarks in the garment of the small farmer, since many of our professional years (domestic and international) have been spent working with and for that clientele group. We know that this approach expands the potential for disagreement among our peer group, but the fact that we accepted the opportunity to discuss the Land-Grant System says something about our character and convictions.

Major Focus of the Land-Grant System

The major points that came out of the first section of this paper relate to the focus or missions of the Land-Grant System—teaching, research, and extension. Teaching was viewed as the preparation of college students to effectively deal with farm issues. We strongly make the point that professors at these universities must be willing to stay abreast of changes and articulate such changes to college students who will be the major connecting link between the present and the future. In addition, we take the position that research is a systematic approach to problem solving designed to increase production. Special mention was made of research at the 1890 Land-Grant Universities in that the focus was on studies designed to improve the quality of life for small farmers. Finally, we pointed out that extension within the Land-Grant System has focused upon the distribution of information to the rural and urban population. It was stated that to have information crucial to the economic survival of farmers and not get such information to the farmer in a form and manner to be utilized in the day-to-day farm operation is not an acceptable extension program regardless of the university.

Collectively, teaching, research, and extension are viewed as the three prong approach to the development of programs and activities designed to improve the quality of life for rural people. Just as importantly, these three land-grant functions must complement each other to maximize their impact in rural and urban America.

Emerging Issues Within the Rural and Urban Sectors That Will Influence the Future Effectiveness of the Land-Grant System

While the impressive history of the Land-Grant System should not be overlooked, there are emerging some significant issues relative to the role of that System in modern agriculture. We are the best fed, clothed, and housed population to be found in the world. Our Land-Grant System has developed an agricultural sector that is respected throughout the world. Less than 3 percent of this country's population is classified as farmers and each member of that small group produces

enough food to feed over sixty additional individuals.

We cannot live off the past accomplishments of the Land-Grant System, as great as they have been. Along with our efficient methods of food production, the Land-Grant System has helped to create a situation in rural America that threatens the survival of small family farmers in this country and places in question our "philosophical approach" to the plight of small farmers in the so-called developing countries.

Casual review of study findings relative to emerging issues that will impact rural America places the future of the small family farmer high on the priority list. In addition, there are some "guesstimations" as to what impact the declining number of small farmers will have on the life-style of our rural population.

Today, small family farmers and commercial farmers who expanded too fast over the past 10 years are faced with foreclosures and loss of the farm to corporations, timber companies or banks. Only the big, efficient, and well-managed farm operations have been able to survive. Aftermaths of the declining number of small family farms in rural America are the deterioration of family life and the decreasing influence of the church, schools, and small agriculturally related businesses.

Just recently, a group of over 250 professional agricultural workers spent 2 days at Tuskegee Institute grappling with four identified issues that should claim the attention of the Land-Grant System in the immediate years ahead. One, it was the consensus of that scholarly group that the land-grant universities must strengthen their approach to involving the family in the farm operation. The declining size of the farm family has resulted in the wife assuming an increased role with regard to family income (farm and non-farm employment). The Land-Grant System must recognize this changing role of the female in the farm business and design programs to increase the employment potential of both the female and male family members. Two, production of farm commodities must receive greater importance in any strategy designed to promote the survival of small farmers. Farmers must be encouraged to increase productivity and lower per unit costs and explore the production of new crops that will give them a comparative advantage with the larger farmers. Three, increasing the farmer's share of the consumer's dollar ex-

penditure for food is a prerequisite to the survival of small family farmers. Today, the middleman receives about 70 percent of the consumer's food dollar and any increase in the farmer's portion will come from farmers performing more of the services between the farm gate and the consumer's dining room.

Another emerging issue destined to impact the future role of the Land-Grant System has to do with absentee farm ownership. There is a strong belief among some professional agriculturalists that in the short run, the ownership of farms by large corporations will assure greater influence over farm output. However, this same group argues that in the long run, such influence will result in consumers paying higher prices for food. These agriculturalists take the position that absentee farm land ownership will result in money flowing out of the rural communities, thus reducing the capacity of local governments to provide needed services to the remaining population. Concentration of farm land in the hands of fewer community-based people will erode the extended family concept so prevalent in rural America. Assuming that absentee land ownership increases, we are destined to experience a shrinkage of the rural tax base, isolation of people from the mainstream of local, state, and national issues and a cadre of non-participating people in government elections.

There is another emerging issue the Land-Grant System must address if it is to maintain its historical record of assisting people residing in rural America. This issue has to do with the return of landless people to rural communities. During the 1940's and 50's, the lack of a national agricultural policy was such that rural people were encouraged to migrate to urban communities. The recent U.S. Census shows that, for the first time in many years, more people are returning to rural America than are leaving—and therein lies another seed of an emerging issue. The new arrivals to rural America are landless, old, and poor. Many have elected to return to their native homeland to spend their remaining years. This displaced population presents serious challenges to the Land-Grant System. They represent a potential evolving demand on the declining income available for social services.

These, then, are what we view as significant emerging issues facing the Land-Grant System. The future of the Land-Grant System is directly tied into the survival of an aggressive

rural farm sector that includes both the small family farmer and the larger commercial farmer.

Major Points to Emphasize if the Land-Grant System is to Continue as a Viable Entity in Rural America

Underlying survival of the small family farmer is the popular attitude that the resolution of the emerging problems facing the small family farm will positively impact the non-farm rural population. Advocates of this position argue that the 1985 Farm Bill should effectively address the problems facing the small family farm in light of its impact on the non-farm rural population.

Our Land-Grant System must take steps to aggressively represent the declining number and influence of the small family farmer. Today, there does not exist a forum to articulate or advance the unique concerns or interests of the small family farmer. This happens to be the situation despite the presence of the Land-Grant System, in general, and 1890 Land-Grant Universities and Tuskegee Institute in particular.

In recent years, the land-grant universities have witnessed an increasing demand from small family farmers for greater attention to their problems and needs. These farmers argue that at times the traditional land-grant approaches to teaching, research, and extension have served as constraints to their economic survival. Available evidence and casual observation of trends partially support the plight of small family farmers. It is apparent that the Land-Grant System must demonstrate an increasing interest in all size farms and the non-farm rural population must be included in any survival strategy for rural America. The 1890 Land-Grant Universities and Tuskegee Institute are most qualified to address the unique problems facing the small family farm.

The argument could be made that the Land-Grant System has never been concerned with the problems and emerging issues facing the small family farmer. Likewise, a strong argument could be made that these universities have never demonstrated a consistent concern for similar issues of the non-farm rural population. As was stated earlier, the out-migration of this group to the larger cities in the 1940's and 50's in search of a better life is evidence of a lack of concern. During

the 1940's and 50's, low-income people residing in rural areas were encouraged to leave for what appeared as long-term economic benefits in urban America. Today, many of these displaced elderly urban people are returning to rural America landless (disenfranchised) and frustrated. These people need help and the Land-Grant System must become more involved in providing alternatives or adjustment strategies to this population.

There is another issue that the land-grant universities must address in the future and that has to do with the issue of farm subsidies and so-called welfare payments. Sometime between the large exodus of small family farmers to urban America and their return to a changed rural America, the composition of the total family income was drastically altered. Today, total farm income consists of income from: (1) the farm operation; (2) off-farm income; and (3) so-called government payments (subsidy or welfare). Particularly, the term *subsidy* has taken on a relatively acceptable importance in measuring total farm income for the commercial farmer. On the other hand, the so-called *welfare payments* for the small family farmer have become a dubious term. Studies of the recent PIK Program reveal that the smaller family farmer shared disproportionately in payments. Fifteen percent of all farmers received 50 percent of the PIK payments. While the increasing number of small farmers in the upper-age group qualified for Social Security payments, average Social Security payments are much lower than for the retirees among the commercial farmers. To advocate that the larger farmers should forego available subsidies (PIK or Social Security payments) would not be realistic. Likewise, government transfer payments to the small family farmers should be viewed as a plan to increase total farm income to that group. The strategy to implement either *plan* (PIK or Social Security) should recognize the financial need of both the small family farmer and the commercial farmer. Again, this is an issue the resources at the land-grant universities should address. Certainly, we should not hold on to an inefficient entity (small or commercial farmer); however, as a national policy, we should state the purpose of subsidies or transfer payments and design a national policy that will be fair to all parties involved.

Social costs as a factor to a viable rural population is another issue the land-grant

universities must address. There are people residing in rural America engaged in farming who know they will lose money. Some of these individuals give greater weight to the fresh country air and leisure living than they do to "money." We should advocate programs to assure these qualities in rural America. On the other hand, there are people--small family farmers--residing in rural America who are desirous of realizing an income from the farm operation. These individuals are in farming for "money." They plan their lifestyle to maximize income from the farm, non-farm and subsidies or welfare payments.

There is a need for the land-grant universities to give more leadership to the formation of farm cooperatives by small family farmers. It is a recognized fact that modern farming requires that the operator reduce labor cost through the use of more machinery, fertilizer, and insecticides. All of these inputs carry a relatively high price tag that tends to limit a single small family farmer's expansion options. However, with proper assistance from the land-grant universities (teaching, research, and extension), small farmers could be encouraged to come together and form cooperatives. Historically, the limiting factor to the formation of such business entities by small farmers is their inability to conceptualize that modern production requires "togetherness" and this is where the expertise at the land-grant university must assume the leadership role.

Our youth must be reminded that there is a future in agriculture. They should know that agriculture is a business that represents opportunities in such areas as farming, marketing, agribusiness, etc. In addition, somewhere along the way, our land-grant universities must place more emphasis on the training of the non-farm population relative to such statements as (1) milk comes from an animal rather than the supermarket; and (2) meat is the result of farmers mixing know-how with mother nature to realize the steak or hamburger on the dining room table. What is significant is to remind the city dweller that "mother nature" is not controlled by the farmer. Hopefully, some of the biotechnology research presently under way at some of the land-grant universities will significantly alter the farmer's control over the environment in which commodities are produced.

The seventeen historically black land-grant universities remain charged with carrying out

the land-grant mission of teaching, research, and public service. However, emerging issues relative to the family farmer are changing circumstances in the areas of clientele served, support levels, problems germane to food and fiber production and protection of the ecosystem. These give rise to the need to re-examine how the tripartite functions work together to achieve common aims.

At this point in history, there are several key and operational initiatives that should be pursued collaboratively by extension, teaching, and research professionals within the 1890 institutional framework. These initiatives represent the totality of what these programs are about and should be pursued from a team approach. They are: (1) assessing the needs of clientele which include farmers, consumers, communities, and agricultural industries, (2) strategic planning in a manner to enhance appropriate focus on short-term and long-range problems of all clientele, (3) setting appropriate priorities to allow for an organized approach to problem solving and opportunity enhancement, and (4) implementation of progress in a manner that would generate maximum return and effectiveness in educating students, development of new information and transfer technology and knowledge to identified clientele.

The remaining portion of this paper will address the preceding initiatives in a broad way. It is intended to aid in revising the concepts of cooperation and collaboration as cornerstone approaches of the land-grant components of the historically black land-grant university. Hopefully, it will be surmised that cooperation among land-grant thrusts has much to offer as teamwork is applied in carrying out the key initiatives.

NEEDS ASSESSMENTS

Targeted attention to problems and issues facing agriculture and community development requires that there be basic understanding of the level and complexity of need. Professionals within the agricultural research, extension, and teaching components are uniquely situated to conduct joint needs assessments of farmers, consumers, communities, and agricultural industries. Due to the expected level and intensity of interaction among the three components and with the users and clientele, it is expected that awareness of needs should be a constant and present issue in the lives of professional

agricultural workers. Working together, the teachers, researchers, and extension professionals are able to determine and address needs that arise relative to: (1) training agricultural students, (2) assuring the transfer of technology and continuing education, and (3) conducting research with the appropriate scope and intensity.

LONG-RANGE PLANNING

In order for the land-grant mission to be achieved, there must be continuous reassessment of the service environment of the institutional program. This reassessment or needs assessment provides critical data and rationale for another significant activity that must be jointly carried out by research, teaching, and extension professionals. That activity is long and short-range planning. Such planning will not only allow for more focused approaches to problem-solving and to the endeavor, but will also enhance the possibility of more cost effective and resource efficient outcomes as well.

Joint long-range planning endeavors enable the three components of the university's land-grant cluster to focus not only on the current problems faced by communities and the agricultural industry, but also to anticipate problems and opportunities 5 to 10 years ahead of time. Such an activity acknowledges present and future scarcity of resources and in turn allows for more realistic allocation and uses. More specifically, both short- and long-term planning, in light of anticipated needs should serve as guides to program development and institution building. When done expertly, maximum return can be gained from present day effort. Additionally, greater flexibility can be built-in to allow programs to adjust to ever-changing clientele needs.

PRIORITY SETTING

It might be concluded by some that when needs have been assessed and long-range planning has been completed, the only remaining task is that of implementation. We would liken those with that thinking to the fabled cowboy who "leaped onto his horse and rode off into all directions at once." Knowing the futility of such a feat, one is encouraged to return to the planning table and engage in a third element of strategic

planning known as the priority setting process. This is a critical endeavor which must be undertaken, collaboratively, by agricultural researchers, teachers, and extension professionals. To be sure, they must also engage input from industry, government, and the lay public as well.

The most pressing rationale undergirding the need for collaboration in this instance is the realization that the three components must: (1) work from a common institutional base and share common resources, (2) ensure that research and extension operate in an interlocking fashion such that information development and transfer initiatives are compatible, (3) focus on the most pressing problems and opportunities early on, and (4) take measures to assure that each of the components are adequately strengthened for meeting programmatic requirements. Joint priority setting (after needs have been assessed and plans have been made) will guide the teaching, research, and extension programs in focusing on the most pressing problems, in effectively utilizing resources to "ride off in the right direction" with the goal of arriving at a common destination.

JOINT PROGRAM IMPLEMENTATION

The program and project level initiatives allow for the most practical focal point of collaboration between the land-grant components. At this level, program efficiencies and effectiveness, along with the desired level of coordination can be achieved in a number of ways including: (1) joint appointment of faculty and staff, (2) joint development of media and publication offices, (3) sharing travel and transportation resources in collective visitation of clientele and constituents, (4) joint sponsorships of workshops, conferences, field days, and forums, (5) sharing of facilities and resources, and (6) cooperation in implementing other activities including needs assessment, strategic planning, priority setting, and outcome evaluation.

Joint appointment of faculty is beneficial to the extent that more appropriate manpower coverage of subject-matter areas in the three programs is realized. Additionally, such appointments ensure that up-to-date and scientific subject matter is transmitted in the classrooms and that new information and technology are appropriately transferred to communities, farmers, and consumers. On

the qualitative side, joint appointments enhance the desired balance in quality professionals who serve in the teaching, research, and extension roles. Finally, it is noted that joint appointments often lead to cost-saving or at least more program return per dollar invested.

Information development for formal and non-formal instruction and technology transfer is often viewed as the principle commodity of land-grant programs. To this end, it is imperative that strong and viable publication and information specialists be employed and supported with adequate facilities and resources. Because of the compatibility between the mandates and needs of research, teaching, and extension functions, it seems to follow that these programs can and do benefit from consolidated efforts in the information arena. Consolidation would not only be compatible with joint appointments, but could also lead to increased efficiencies, greater overall production and higher quality products, that reflect state-of-the-art information and style.

Benefits from joint program implementation would be realized from the other examples cited above. It can be appropriately concluded that the public is better served by more cooperative linkages between the land-grant components within and among the historically black land-grant institutions. Every effort should be made to strengthen the linkages and to foster continued activities in the areas of needs assessment planning, priority setting, and joint project implementation—domestic and international.

As agents of change, the 1890 Land-Grant Universities have demonstrated what can be accomplished by people in developed and developing countries. The rich and varied experience of the expertise located at these universities is living evidence of how teaching, research, and extension can serve to improve the quality of life for so-called people "left behind." Certainly, the goal was not accomplished in a fortnight but history will record that since 1890 much has been accomplished to bring black Americans to the point where they enjoy many of the fruits of liberty. It is obvious to the strongest critic, that efforts of these universities have resulted in blacks assuming increasing roles in government, business, education, and technology. These universities continue to transform individuals who can provide productive contributions to the nation's gross national product. Students from these universities are productive not simply because their skills have been improved, but because they are exposed to the story of human progress, the lesson of their history and the liberalizing effects created by this kind of involvement. Graduates of the 1890 Land-Grant Universities and Tuskegee Institute have developed the background for meaningful career experiences in an environment where an appreciation for self worth is developed.

Most of the 1890 Land-Grant Universities are located in areas where agriculture is similar to that found in developing countries. Limited adaptation would be required for personnel from these universities to help people in other countries achieve self-sufficiency in food production.

REFERENCES

- National Rural Center. *Public Agricultural Food Policies and Small Farms*, 1980.
- Williams, Thomas T. *The Unique Resources of the 1890 Land-Grant Institution*, Louisiana State University Press, 1979.
- Williams, Thomas T. *Reading on Rural Development; Integrated Strategies for Rural Families and Small Farms*, Tuskegee Institute Press, 1983.
- Williams, Thomas T. *Proceedings of the 42nd Professional Agricultural Workers Conference* (forthcoming).

