

Mobilizing Development For Agricultural Institutions: Experiences From Bunda College of Agriculture, Malawi, Africa

Zachary M. Kasomekera

Background

The success of Bunda College of Agriculture from an initial intake of 35 students in 1966 to the current average intake of 110 students was originally influenced by external forces. But recently, effective local leadership and management skills have shaped the college to international standards. The driving force behind Bunda College's success is the institution's response to prevailing national, regional, international, and, yes, donor needs and preferences. Over the period from 1966 to 1999, Bunda College has doubled its student population from 250 to 550, and the academic establishment has also doubled from 26 to 53 staff.

The development route for Bunda College has at times been rough and challenging, except for the period from 1966 to 1976 during which the newly independent Malawi Government resolved to make agriculture its top priority. Agriculture, especially the smallholder sector, was the only viable development alternative for Malawi, which was among the 25 poorest nations in the world in 1964 when independence from the British was achieved. Faced with abject poverty (per capita income less than \$100) and a high population density (80 people per square kilometer, four times the African average in 1976), the most viable development alternative for Malawi was improvement of small-scale agriculture. Prior to 1964, Malawi's major foreign exchange earner was labor export to neighboring countries, mostly South Africa and the former Rhodesia, which absorbed up to 60 percent of Malawi's wage employment.

Malawi, unlike her neighbors, has no significant mining industry and the only exploitable resources have been fertile soils and reasonable average rainfall

(1100 mm/year). In the 1960s, lack of modern agricultural extension proved to be the major stumbling block to rapid agricultural development, hence the need for a higher-level training institution in agriculture.

The Role of Bunda College of Agriculture

In the Malawi Government Development Policy, 1971 to 1980, agriculture was given the highest priority; the main area of emphasis was small-scale farmers who constituted 80 percent of the total population. But by 1975, technical agricultural personnel served only 9 percent of small-scale farm families. Bunda College, instituted in 1966 under the Ministry of Agriculture, was mandated to meet the 91 percent shortfall in agricultural technical personnel, especially in extension. This was an ideal situation for Bunda College to grow with full support of government policies. Indeed, the period 1962 to 1981 was a boom period for Bunda College. The major challenge was to design a curriculum that would focus on persuasive agricultural extension methods, in contrast with the harsh colonial extension methods that imposed prison sentences for offenders. The University of Massachusetts was the major collaborating partner with Bunda College in developing this new curriculum.

The Ministry of Agriculture was the main proponent for the establishment of Bunda College in 1966 with a \$1.6 million grant from the United States Government. The University of Malawi had been founded in 1964 by the University of Malawi Provisional Council, which was also mandated to consolidate all colleges of higher education. Hence, Bunda College was incorporated into the

University of Malawi in January 1967. The college has had dual lineage since 1967, conducting all administrative business with the Ministry of Education through the University Central Offices, and executing all technical matters with the Ministry of Agriculture. The early main focus of Bunda College was to train agriculturists who could meet the needs of small-scale farmers and to conduct research that could improve small-scale productivity.

Early development efforts

During the period of 1962-1980 there were two major donors, the United States Agency for International Development (USAID) and the British Overseas Development Agency. The British Government provided funding for some of the infrastructure (library and hostel) during the period 1966 to 1967, while USAID provided \$1.6 million to undertake construction of most of the facilities at the new college. These early structures were the basis for increasing the student population from 35 in 1966 to 153 in 1969. The agriculture personnel technical gap of 91 percent in 1972 precipitated significant attention from donors.

In the early 1970's, the University of Malawi and the Malawi Government were convinced that Bunda College had to be expanded to a student population of 365 by 1980 in order to meet the high demand for agricultural technical personnel. By 1975, the student population was 209, of whom 19 were female students; while the total academic staff complement was 26, with only 6 local staff and 20 expatriates. Bunda College set out on an aggressive localization program aimed at achieving 92 percent localization by 1980 with a projected staff complement of 36, of whom 32 would be local staff. This was a very important concept and one that has preserved the academic staff capacity, which currently stands at about 98 percent local staff. Up to two thirds of those staff members have doctoral degrees.

The 1976 to 1981 expansion project was the turning point for Bunda College, from a small college to a medium college by Southern African standards. With a staff complement of 36 and a student population of 365, the college had attained the critical mass necessary to embark on local consolidation. Infrastructure funding came from USAID with a \$4 million grant, and FAO assisted in providing 40 man-years of scholarships and

27 man-years of technical backstopping personnel. With five multipurpose instruction structures (laboratories, lecture theaters, offices), 21 senior staff houses, and 64 support staff houses, this was the most extensive single construction project for Bunda College. At the end of this development phase, Bunda College had successfully redesigned its curriculum to train researchers, planners, and extension personnel at diploma and degree levels. Part-time masters and doctoral programs were offered to deserving candidates, and the college had embarked on various research projects in agriculture.

Stagnation period

Bunda College had filled most of the gaps in the agricultural technical personnel sector so that the period 1981 to 1990 did not experience growth of any significance. As of 1981, the college enrollment had grown to 427 students, almost a 100 percent increase from the 1976 figures. The employment market had started to feel the increased output from Bunda College so that it was not unusual for graduates to wait for up to a year before finding a job. The employment trends started changing from the previous 70 percent employment by the government to about 40 percent while the other 60 percent were absorbed by the private sector.

This was a period of self-examination for Bunda College to strike a balance that would not only satisfy the new employers but also attract donors to fund infrastructure development. Until 1981, the college development was largely initiated by the government, especially the then Head of State who had a personal interest in agriculture and who regarded Bunda College as his special brainchild. Indeed, it was not unusual in the years 1969 to 1979 for the principal of Bunda College to be summoned by the Head of State to review the progress of the college.

Leadership in agricultural colleges calls for the ability to solicit advice not only from peers but also from the consumers, current students, and alumni. Most university colleges in Southern Africa have the External Examiner Peer Review System, and there is always a need to actively engage employers, alumni, and students in a constructive dialogue that can pinpoint areas of concern. With little, sometimes none at all, government initiative, Bunda College embarked on impact analysis to isolate critical areas of weaknesses and strengths. Of immediate concern

was the relevance of the curriculum, which was a strait-jacket concoction of courses common to all students. The only exception was that all female students were required to take home economics courses, whereas male students took agricultural engineering. It wasn't until 1984 that both male and female students had a choice to take either engineering or home economics, and this was the first step in major curriculum reorganization.

To assess the impact of Bunda College on the Malawi economy, a series of consultative workshops and conferences was conducted during which alumni were invited to critique the curriculum and suggest improvements. Students were also invited to pinpoint areas of overlap and/or repetition and areas of omission. Three areas of concern were: (1) Bunda produced generalists that had to be retrained for specialized areas; (2) the Bunda product lacked management skills and, hence, could not fit in the private sector; and (3) graduates from Bunda did not have skills in commercial agriculture; hence, they could not run agricultural commercial enterprises.

These findings were partly obtained from an impact tracer study funded by USAID in 1986 whose focus was to assess past successes of Bunda College programs and prescribe changes for the future. A new curriculum was designed and implemented in 1986 that allowed students to take common courses in the first two years, and then opt for specialized areas during their third year and subsequent two years for those who proceeded into the degree program. As the first graduates with specialization left Bunda College in 1991, the college had started gaining recognition not only in Malawi but also in the whole Southern Africa region. At the same time, the capacity-building momentum that had started in 1976 was yielding good results, so that by 1989 the College staff was 90 percent localized and up to 60 percent of the local staff members had doctoral degrees. Despite these positive aspects, Bunda College together with the four other colleges in the University of Malawi system did not see much development up to 1991, mainly due to the lack of local initiatives and marketing of institutional capabilities.

Mobilizing Development

The transition from government-initiated to locally mobilized development is very critical because, in most cases, it is the same college leadership that has to facilitate this transition. More often than not, the old leadership expects the government to initiate development, while the government might have shifted its attention to current pressing needs.

Indeed, it took until 1986 for Professor Brown Chimphamba, the principal of Bunda College since 1981, to start enticing his staff to prepare a comprehensive development proposal to establish the Center for Agricultural Research and Development (CARD) aimed at enhancing research and consultancies. Until this time, the only major research activity at Bunda College was the Collaborative Research Support Program Bean/Cow Pea project, funded by USAID, which was initiated in the 1970s. Lack of tact and experience in soliciting funds for development hampered progress on the proposed CARD. The spirit of locally initiated development projects, however, was instilled among staff at Bunda College and this was the basis for the rapid development of Bunda in the 1990s.

One major achievement during the period 1981 to 1990 was the improvement from gravel to a tarmac surface of a 20-kilometer access road to Bunda College, made possible through direct negotiations with USAID. The gravel road, which was always in a poor state especially during the rainy season, had isolated Bunda College since 1967. Along with getting a good road, the then principal also lobbied the government to improve telephone communications. Until the late 1980's the college had only two telephone lines, making it impossible to conduct any meaningful business by telephone. An improved road and expanded communications were significant landmarks in the development of Bunda College because the outside world was now able to access the college by road and to conduct considerable business with the college by telephone.

It was clear for Bunda College that the recipe for development would now depend on a number of principles, which included the following:

- Redefine the curriculum to meet prevailing government policy and the needs of the private sector;
- Carry out aggressive outreach activities to inform all potential funding agencies about the potentials of the institution and the major constraints preventing optimal operation;
- Build institutional confidence among staff so that they are able to articulate the vision and commitment of the institution in national and regional development;
- Conduct a thorough goal-setting exercise for all departments and faculties, and rank these goals at the departmental, faculty, and college level so that potential funding agencies can choose areas of assistance;
- Engage in continuous dialogue with donors and government to keep up with their areas of interest and procedures for project preparation and presentation; and,
- Institute a staff appraisal system that is objective, transparent, and consistent in order to reward high performers, but at the same time encourage below-average staff.

The early history of Bunda College reveals a tradition of public relations conducted mainly through an annual field day (open day) that attracted local farmers, donor representatives, and government officials. This occasion was the forum for lobbying policymakers and donors alike to support Bunda College. As the years passed, finances could not allow such a large gathering of people to be provided with lunch and refreshments so the event became bi-annual and eventually was dropped. An alternative activity (Getting to Know Bunda) was introduced in the mid-eighties by Professor Chimphamba.

This activity was targeted at selected potential donors and policymakers who were invited to spend a day at Bunda College to examine the college research and teaching activities. This approach was not only affordable but also narrowed down negotiations to the potential donors.

In 1990, the new principal, Professor Zimani Kadzamira, introduced yet another effective approach to donor sourcing and lobbying of policymakers. Bunda was fortunate to be assigned a principal who had informal ties to the then ruling circle, an avenue he effectively used to influence development activities of the college. He also adopted a door-to-door approach to influence donors to pick up the proposed CARD initiative at Bunda College. His political connections and the effective lobbying with donors paid dividends and USAID pledged to fund a component of CARD, the Agricultural Policy Research Unit.

During the period 1992 to 1998 Bunda College has seen development equal to, if not greater than, that of the period 1966 to 1981. The door-to-door donor sensitization was systematically executed with well-articulated goals and objectives. In 1992, as the new principal, I requested that all Heads of Departments prepare ten-year plans, which indicated major past achievements, existing underutilized human capacity, and the major constraints. The ten-year plans clearly defined goals and objectives for each department, from which college-wide priorities were drawn up. The development of institutional goals and priorities is a necessary condition for donor funding sourcing, and these plans provided the basis for the current Bunda infrastructure development.

Among the pressing needs for the college was the library, which had been designed for a student population of 250 compared with a prevailing population of over 500 in 1992. This was considered a critical constraint to the Master of Animal Science program introduced in 1989 and to other masters programs that were on the drawing board. Traditional donor funding could be used to finance library expansion, but consultations with USAID showed that the Local Currency Account could be used to fund the expansion. A total of U.S.\$875,000 was secured from USAID in local currency and paid in advance to Bunda College to expand the library and construct one hostel. After more than 25 years of existence, Bunda College was able to embark on a

major challenge to locally manage donor funds on a construction project. This was a much needed litmus test for the college, and this project earned the college the respect of the donor community when the project was successfully completed and the library capacity was increased by a factor of four.

Forward planning in leadership is as critical as efficient execution of projects, especially in developing countries where currencies can be devalued by as much as 500 percent during the life of the project. The original USAID grant to Bunda in 1993 was adequate for library expansion and hostel construction. But by the time the project was being implemented, the local currency had been devalued by 300 percent and the original grant was not enough even for library expansion. In anticipation of possible currency fluctuations, the college had deposited 80 percent of the funds in a fixed deposit that yielded high interest, and this is what provided the extra money to complete the library. Another U.S.\$60,000 was negotiated from the World Bank to provide furniture and other equipment for the library project.

The successful negotiations and execution of these major projects sparked a zeal for seeking donor funding among members of the staff, and this resulted not only in more funds but also in a proliferation of donors. Two comprehensive projects were developed during the fiscal year 1995/96, one for Social Forestry or Agroforestry to be funded by the European Union, and the other on Aquaculture to be funded by the Japanese. Both were donors that had never funded infrastructural developments at Bunda College before. Both of these projects were successfully negotiated by 1997 with combined funding of U.S.\$11 million (U.S.\$5 million from the EU, U.S.\$6 million from Japan).

The most important lesson learned from the EU and Japanese projects is the need to fully engage the government and the donors. Earlier experience with USAID showed that the success of project negotiation lies in both the institution's capabilities and the inclusion of a donor facilitator. It is important to identify a senior officer within the donor agency who can assist you with project preparation so that proper format and wording, together with favorite buzzwords, are incorporated in the draft proposal. At the same time, the institution has to team up with government departments that can verify the national needs of the proposed projects. Bunda

College worked closely with the Fisheries Department in the aquaculture project and with the Department of Forestry in the Social Forestry project.

The ten-year plans from most of the departments at Bunda College included graduate programs, but the graduate program in Animal Science had to be halted in 1990 due to the lack of accommodations. The German Government technical assistance agency (GTZ), threatened to withdraw funding altogether if the Malawi Government did not provide adequate accommodations, but there was no funding at that time for infrastructure. The time was ripe for Bunda College to demonstrate institutional commitment to graduate programs. Indeed, the college used local resources to design and construct the first-ever Graduate Students Hostel with 24 beds (spaces for 8 females and 16 males). There was a general outcry, especially from the University Office, that Bunda College could not plan and execute a locally funded construction project, but with careful monitoring the college achieved its goal. This was a landmark for the subsequent interest among donors to fund graduate programs at Bunda College. In most donor-funded projects, local commitment is as important as capacity to execute the proposed project.

In resource-poor countries like Malawi, it is sometimes not easy to convince the government and donors alike to fund new programs because sustainability is always questionable due to rapid saturation of human resources demand. The saturation of extension personnel in the Ministry of Agriculture by 1986 is a case in point for Malawi. Bunda College was fortunate to have a pool of academic staff that made the college attractive to regional programs. The Masters in Animal Science, funded by the German government, was one of the first regional programs whose success led to a regional program in aquaculture, which was the basis for the Japanese aquaculture project. The college has now been used for regional programs in tissue culture, agroforestry, and environmental policy. Most donors regard the regional approach as viable in terms of demand for human capacity and cost effectiveness.

The natural development of a university college is the attainment of autonomous university status, with well-established undergraduate and graduate programs. Bunda College introduced the first masters program in 1989 and by 1998 the college had managed to implement five more masters programs; these have greatly enhanced the college's image at the national and regional levels.

Achievements

During the period 1990 to 1998 Bunda College has made significant achievements in the areas of infrastructure and curriculum development. A milestone in curriculum development was attained in 1996, through the hard work of the Dean, Dr. George Kanyama Phiri and his Heads of Department. Bunda College managed to design and implement a grade point average system in order to allow easy transfer of credit hours at the international level. It is expected that the college can now attract a wider circle of international students, while allowing its students to transfer university credit hours to other countries.

Research funding, which has improved from about 29 percent of total budget in 1989 to 46 percent in 1997, has been yet another significant achievement at Bunda College. Most of this funding has been directed at the new masters programs and collaborative research between Bunda College and international universities and organizations. For a long time, research at Bunda College was funded mostly by USAID mainly through the CRSP Bean/Cow Pea Project. As of 1997, there were more than 11 international universities, donor agencies, and governments engaged in research. The key to successful sourcing of donor research funds is the caliber of staff members to produce quality research work and diligence of the administration in managing research funds.

Enhancement of female students' participation in university education programs has been a University of Malawi policy since 1990. The target is to reach a 30 percent female enrollment in all university programs. Bunda College embarked on a role model initiative for female students, whereby all academic departments at the college were requested to recruit at least one female staff member. By 1995, all academic departments at the college had accomplished this goal. This approach is yielding dividends in terms of increased female student enrollment at Bunda College; the female student component has grown from 16 percent in 1990 to 24 percent in 1997.

The student population has grown from 400 in 1990 to 550 in 1997 and is expected to reach 800 once the current infrastructure changes are completed. Out of the current student population, up to 20 percent are graduate students and at least two to five percent are foreign students. The goal is to attain a 30 percent graduate student component and 10 percent foreign students.

The challenge to university leadership is maintenance of research and development momentum. Bunda College has, for a long time, wanted to develop a comprehensive strategic plan that can provide future development areas in a systematic manner. Although departments had prepared ten-year development plans in 1992, these were mostly shopping lists that lacked coherent structure for long-term donor commitment. The Government of Norway's Minister of External Affairs visited Bunda College in 1997, and the college highlighted its needs together with the need to prepare a strategic plan to consolidate future developments. A fact-finding mission to Norway led by the then Vice Principal, Professor Leonard Kamwanja, managed to convince the Norwegian Government to pledge long-term commitment to Bunda College together with resources for developing a strategic plan.

A draft strategic plan has now been prepared and the overall mission of Bunda College as we move into the new millennium is stipulated as follows:

- The mission of Bunda College, as an educational institution of higher learning in agriculture and natural resources in Malawi, is to advance and promote knowledge, skills and self-reliance for:
 - Sustainable food production and utilization;
 - Improving income, food security and nutrition of the rural and urban populations;
 - Conservation and management of bio-diversity, natural resources and the environment; through the provision of information, teaching and training, research, outreach and consultancy in response to national and global needs.

The emphasis in the future outlook of Bunda College is a participatory approach to curriculum development and empowerment of graduating students to embark on self-employed agricultural business ventures with limited reliance on wage employment. This approach calls for re-engineering not only the curriculum but also the lecturers, who should place more emphasis on real-life agricultural problems that should be solved using alternative theoretical approaches.

Persistent Constraints

The Bunda College scenario is common to most of the countries in Southern Africa: the establishment of the college is through government initiative, but there is always a point of stagnation in the development process. Most of these countries, Malawi included, have the pressure of high demand for university education. This high demand forces university institutions to enroll more students than they are able to manage, which leads to overcrowding and the subsequent lowering of educational standards. Compounded with this problem is the gradual erosion of local currency value, so that the actual local currency amounts may be increased but in real terms the value could actually be going down.

National institutions such as Bunda College are political assets in which management has to conform with prevailing political aspirations; as such the College cannot achieve optimal levels of management. One of the most difficult areas is the student fees, which in most cases require government approval. Financial constraints could be alleviated if the true cost of a university education was charged to students, but this has not been possible given the low incomes of the majority of the electorate in Malawi.

There is a persistent poor distribution of salaries in Malawi whereby university personnel seem to get very low salaries when compared with professionals in the private sector. This state of affairs affects morale among staff and those that are offered jobs outside the university system do not return to their university posts. This is the major threat to Bunda College stability and achievements. Current salaries at Bunda College, with most academic staff receiving less than U.S.\$500 per month, turn this threat into panic. Supplementing of salaries of local professionals has been debated but this is some of the most difficult funding to secure from donors.

In this day and age, communication is a key to effective teaching, research, and administration, but the level of communication technology in Malawi is still lagging behind international standards. Coupled with this problem are the high cost rates for telephone and other related services. For example, telephone charges from the United States to Malawi can be as low as U.S.\$0.50 per minute, yet calling the USA from Malawi is up to U.S.\$3.00 per minute. This limits the acquisition of research data and other pertinent information for effective university teaching, hence retarding research and development in Malawi. This scenario is true also with other research and development equipment and services such as computers and the internet.

Valuable Lessons

The experiences at Bunda College offer a number of lessons that can assist other colleges, especially those in Southern Africa, to plan and execute development initiatives. The most paramount lesson is the need to clearly articulate institutional goals and objectives that can be used to solicit assistance from government and donors.

Institutional capacity is a very important prerequisite to sustainable development and donor support. It is very critical to impress on government and donors alike that the institution can manage and administer resources. A disappointed government or donor is a fatal liability to a young institution, and all efforts should be made to live up to the expectations of these funding sources.

Leadership skills are a necessary ingredient to mobilizing institutional development. No matter what human capacity may exist, if it is not properly harnessed, managed, and directed there will be chaos and sometimes conflict. The best leadership recognizes its strengths and weaknesses and is able to delegate effectively. It is important to appoint local staff into leadership positions because they are most often aware of the existing potentials of the institutions.

Indeed, the most important ingredient to successful development mobilization is the ability to identify government policies of the day relevant to the institution, and to identify prevailing donor areas of interest. Institution development can only be supported if it is in line with current government policies and/or donor priorities.