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ASSESSMENT OF AGRICULTURAL EXTENSION EDUCATION PROGRAMS IMPLEMENTED BY HEIs IN REGION XII

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Abstract

Region XII is one of the most abundant regions in Mindanao where industrialization has not yet proliferated extensively. Consequently, it is Philippine's main agricultural supplier to domestic and export markets. Region XII is composed of the following provinces and cities. North Cotabato, Sarangani, South Cotabato, Sultan Kudarat, Cotabato City, General Santos City, Tacurong City and Kidapawan City. The research design that was employed in this study is a descriptive research using cross-sectional survey. This study also correlational as it attempted to establish relationship between socio-demographic characteristics of extension implementers and program beneficiaries on effectiveness, productivity and sustainability of extension program.

Majority of the respondents were males; half of them were Ilonggos; less than half worked as program implementers in their school, less than half had master's degree and served as implementers from 21 to 25 years. Profile of the beneficiaries show that majority were males, had gross monthly income of PHP 1,000 and below, and had been benefiting from agricultural extension programs for 3- 4 years. Most were Ilonggo, from 16-20 years old, farmers, high school graduates and had been in the community for 6-10 years. All four HEI's in Region XII implemented livelihood programs. Among other programs, projects and activities implemented were sustainable development, environment and resource management programs.

Keywords: Agricultural Education Extension, Assessment, HEIs, Ilonggo, Region XII

INTRODUCTION

Philippines is largely an agricultural country. Its second largest island, Mindanao, is considered to be the country's food basket because of its vast agricultural area. Agriculture is the driving force behind Mindanao's economy. More than one-third of the island's labor force is employed in the agriculture, fishery and forestry sectors (MEDCo, 2004).

Region XII is one of the most abundant regions in Mindanao where industrialization has not yet proliferated extensively. Consequently, it is Philippine's main agricultural supplier to domestic and export markets. Region XII is composed of the following provinces and cities. North Cotabato, Sarangani, South Cotabato, Sultan Kudarat, Cotabato City, General Santos City, Tacurong City and Kidapawan City.

For years, Higher Education Institutions (HEIs) in the region, particularly those offering courses in agriculture, have taken a proactive role in designing and implementing agricultural extension programs to the different areas within the region. Extension is among the higher education institutions' major concerns, in some cases, the major function, that proved to have highly contributed in the promotion of the improvement of the quality of life especially among Mindanaoans. These HEIs carry out various programs, projects and activities in areas such as access to basic education, functional literacy cum livelihood, alternative learning system establishment of community learning centres, regional centre for human rights technical consultancy and counselling, technology information dissemination and community outreach. These services are extended to the clientele and partner beneficiaries that include the local government units, community leaders, animal and plantation crop operators, the less-fortunate and underprivileged farmers, housewives, fisherfolks, out-of-school youth and pre-school children in Mindanao. Extension personnel also work with regulatory agencies to identify best management practices that minimize hazards.

So far, none has done an intensive assessment of Agricultural Extension Education programs of the different HEIs in the light of the current educational and agricultural policy. It is on this context that this study was conducted to assess the effectiveness, productivity and sustainability of Agricultural Extension Education Programs of Higher Education Institutions (HEIs) in Region XII that were completed for the last five (5) years since 2005.

METHODS

The research design that was employed in this study is a descriptive research using cross-sectional survey. This study also correlational as it attempted to establish relationship between socio-demographic characteristics of extension implementers and program beneficiaries on effectiveness, productivity and sustainability of extension program.

Four Higher Education Institutions were the target schools of this study: Notre Dame of Marbel University (NDMU), a Catholic educational institution located in the Koronadal City, South Cotabato and the first Marist University in the Philippines that houses the largest library in Mindanao; Southern Baptist College (SBC), founded in 1952 located in M'lang; Cotabato Foundation College of Science and Technology (CFCST), a state college in Arakan, Cotabato which is mandated to provide higher technological, professional, vocational training and industrial apprenticeship in the fields of science, agriculture and industry and Sultan Kudarat State University (SKSU), a state college in Tacurong, Sultan Kudarat mandated to provide professional and technical training in science and technology, advanced and specialized instruction in literature, philosophy, arts and sciences.

The respondents of the study were the program implementers, faculty or staff, students, and beneficiaries of the agricultural extension programs of HEIs involves: Notre Dame of Marbel University (NDMU), Southern Baptist College (SBC), Cotabato Foundation College of Science and Technology (CFCST), and Sultan Kudarat State University. The agricultural extension program of these schools provide relatively satisfactory extension services to program beneficiaries in the locality.

RESULTS AND DISCUSSIONS

Socio-Demographic Profile of the Program Implementer- Respondents

Sex

It is shown that 18 (69.2%) of the respondents from CFCST were males; 4 (57%) of the respondents from SBC were females; 4 (57%) of the respondents from NDMU were males; while there is an equal number 5 or 50% of male and female respondents from SKSU.

Taken as a whole, majority of the respondents were males (30 or 60%) while less than half were females (20 or 40%). This result affirms the study conducted by FAO (2005), that most extension workers are males because they are involved in hard physical work such as land clearing, planting and harvesting.

Tribe

In terms of the implementers' tribe, there were 15 (57.7%) respondents from CFCST who were Lumads; 9 (90%) from SKSU were Ilonggos; 6 (85.7%) from SBC were Ilonggos; while only 5 (71.4%) from NDMU were also Ilonggos.

As a whole, 25 (50%) of the total respondents were Ilonggos. This implies that half of the respondents were Ilonggos, the fact that the places where the study schools are found are Ilonggo-dominated municipalities.

This means that most of the extension workers are from the areas where the HEIs are located. Furthermore, it is important that extension workers must come from the community where the programs are implemented because use and sharing of knowledge within the community is guided and regulated by prevailing customary laws and norms. As such, indigenous knowledge is a priceless heritage to be safeguarded, developed and passed on from one generation to the next (Carino, 2010).

Position

In terms of position, the result revealed that 11 (21.15%) were program implementers, 9 (17.31%) were extension coordinators and 5 (9.61%) were community workers and community organizers' respectively. Other positions were distributed into deans, teachers, principal, instructors, asst. professors and others. This implies that the strength of any extension work relies on its focused workforce. That is why extensions centers take huge part in the overall life and works of an institution.

Highest Educational Attainment

The table further shows that in terms of education attainment, majority of the respondents at SBC and CFCST were master's degree holder with a frequency count of 6 (85.7%) and 11 (42.3%) respectively, majority from SKSU and NDMU were baccalaureate degree holder with a frequency count of 8 (80%) and 4 (57.1%) respectively.

Overall, less than half of the respondents were master's degree holders 20 (40%). This implies that those involve in extension work in the four institutions have not completed yet their graduate education.

Number of Years as Implementer

In terms of years as implementer, more than 50% of the implementers from SBC and CFCST were into extension work for over 20 years while over 50% of the implementers in NDMU and SKSU were into extension work for less than 10 years.

As a whole, 12 or 24% of the implementers were into extension work for 21 – 25 years. This affirms the statement that the longer the years spent in service, the higher the learning experience of the extensions workers which could be applied in implementing extension programmes particularly in interaction processes involving other cognate agencies (www.iosrjournals.org).

Number of Years in the Community

The beneficiary respondents from SBC were in the community for 6 to 10 years (34 or 94.4%) while in NDMU, all the 30 respondents were in the community for 1 to 5 years. In SKSU, many respondents (12 or 28.6%) were in the community for 6 to 10 years while in CFCST, the respondents were in the community for 1 to 55 years.

As a whole, 49 or 31.2% of the respondents were in the community for 6- 10 years.

Numbers of Years as Beneficiary

As to the number of years as beneficiary, all the 38 beneficiary respondents of SBC had 3 to 4 years while in CFCST, the respondents were beneficiaries for 1 to 2 years (29 or 87.9%). In NDMU, majority of the respondents were beneficiaries for 3 to 4 years (22 or 73.3%).

Taken as a whole, 63 or 51.6% of the respondents were beneficiaries of the program for 3-4 years. This implies that the respondents are relatively new to the extension programs of the colleges/universities under study.

The groups of beneficiaries of the extension programs of the different HEIs are found in Table 3. In SBC and NDMU, the groups mostly served were the OSY and children, 5 or 19.2% and 7 or 53.3%, respectively, In SKSU, it was a group of farmers (9 or 37.5%) as well as in CFCST (25 or 40.7%).

As a whole, 41 or 40.20% of the respondents were framers. It is also worth noting that 41.18% of the recipients were women, OSY and children.

List of Agricultural Extension Education Programs, Projects and Activities implemented by HEI's from 2005-2009

Agricultural Extension Programs Implemented

All four HEI's in region XII implemented livelihood program having 30 (33.71%), followed by sustainable development, 25 (28.09%), Environment and Resource Management Program, 23 (25.84%).

As a whole, livelihood program was the top concern of the different HEI's 30 (33.71%), on the other hand Cooperative and/ or Marketing Program was the least priority with 11 or 12.36%.

Moreover, other related programs implemented by the different units of the different HEI's were Agricultural Research and Documentation, 20 or 44.44%, Advocacy and Training

Program, 17 or 37.78%, and Food Sovereignty, 8 or 17.78%. The table further revealed that Advocacy and Training programs were carried out by all institutions.

Projects

Animal production, crop production and agri-related projects were the projects implemented by the HEI's in Region XII. On animal production, 22 (27.5%) beneficiaries were engaged in duck raising, 14 (17.5%) were into swine production, 13 (16.25%) did goat raising and small ruminant raising, 11 (13.75%) on broiler production, 8 (10%) were into cattle raising, 7 (8.75%) on egg production and 5 (6.25%) were engaged in native chicken raising.

On crop production, 20 (28.17%) were into plant crop production (banana, mango, pomelo, etc) and nursery production respectively, 16 (22.54%) were into corn production while 15 (21.13) were engaged in plantation crops such as rubber, coconut, African palm and sugar cane.

On Agri-related projects, 14 or 18.67% did model farm development, 13 (17.33%) were engaged in handicraft, food processing and vermi-production respectively; 12 (16%) were into rice milling, 6 (8%) did aqua-culture and 4 (5.33%) on feed milling.

Extension Activities

Extension activities implemented by the different HEI's in Region XII, shows that 24 (8.92%) activities related to organic farming were implemented, 21 (7.81%) trainings on farming system and seminar-workshop on compost making respectively; 20 (7.43) trainings on crop production, 17 (6.32%) seminar workshop on mushroom production, 16 (5.95%) trainings on organic rice production, 15 (5.58%) on forum, 14 (5.20%) on reforestation and mini-forest establishment and seminar workshop on corn production, respectively; 13 (4.83%) on food preparation, preservation and proper home management, 11 (4.09%) seminar workshop on vermi production and management, 9 (3.35%) on development of community, on livestock, poultry and aqua products and management, on seminar workshop on vegetable production management, on exposure and travel (lakbay aral) respectively, 8 (2.97%) on farmer's summit, 7 (2.60%) on the establishment of community seed banking and needs assessment respectively, 6 (2.23%) on field school and techno clinic respectively, 2 (74%) on production of IEC materials, and 1 (37%) on computer literacy. Majority of the activities implemented were on organic farming.

Facilitating Factors During the Period of Implementation

The facilitating factors during the period of extension program implementation by HEI's in Region XII. A total of seven (7) facilitating factors were identified, namely: participative and supportive partner communities emerged as the number one (31 or 24.03%) factor for the successful implementation of the extension program; second was active and committed program implementer (22 OR 17.05%); third, was access to LGU (21 or 16.26%); fourth was supportive administrators; fifth, access to resources, facilities and equipment (17 or 13.18%); sixth, was sufficient fund support and last was access to funding agencies. Results imply that for any extension program to be successful it must gain the acceptance of the partner communities.

Problems Encountered/Hindering Factors during period of Implementation

Nine (9) identified hindrances were identified to a successful implementation of the extension program, such as: insufficient fund ranked number one (31 or 17.32%), second was on transportation and vehicle (26 or 14.53%), third was on equipment and facilities (25 or 13.97%), fourth on peace and order situation and too many demand from communities, fifth on multi-tasking (16 or 8.94%), and sixth on specialist or human resource and the lack of manpower, and lastly on office supplies (11 or 6.15%). This implies that extension activities require finances and without sufficient budget support from the institution, the extension program is doomed to fail.

Extension Program Effectiveness, Productivity and Sustainability

Effectiveness

In terms of clarity of the program objectives of the agricultural extension program, the result revealed that it was “highly effective” for both SBC and CFCST while “effective” at SKSU and NDMU. Having an overall mean (\bar{x}) of 4.71, the result implies that clarity of the activities of the agricultural extension program for the four institutions were “effective”.

The programs, projects and activities implemented were “highly effective” in SBC and CFCST while it was “effective” in SKSU and NDMU. With $\bar{x}= 4.20$, it implies that the programs, projects and activities implemented were “highly effective”.

In assessing the targeted needs and insuring that it reached the intended beneficiaries, the result revealed that it was “highly effective” in SBC and CFCST while it was “effective” in NDMU and SKSU. However, since $\bar{x}= 4.15$, this implies that it is effective among the four HEIs.

The result also reveals that the implementers in SBC and CFCST were highly effective but effective in SKSU and NDMU in terms of approachability and availability. However, the overall mean 4.15 implies that the program is effective in terms of approachability and availability of program implementers among the HEIs.

The result further reveal that the provision of collaboration with other agencies was “highly effective” in SBC and CFCST and “effective” in SKSU and NDMU. The overall $\bar{x}= 4.17$ implies that it is effective.

In terms of the attainability of technology and the capacity that it is doable, the obtained mean, $\bar{x}= 4.22$ which showed that it was ‘highly effective’ in SBC and CFCST and ‘slightly effective’ in NDMU and SKSU.

Of being economically feasible of the program, $\bar{x}= 4.01$ implies that it was “effective”. However, it was “highly effective” in SBC and CFCST while it was “effective” in SKSU and NDMU.

The programs were also “highly effective” in terms of safe and sound environment with $\bar{x} = 4.24$; although it was “effective” in SKSU and NDMU.

The program was ‘effective’ in terms of cultural acceptability with a $\bar{x}= 4.15$. However, it was “highly effective” in SBC and CFCST.

The program was “highly effective” in terms of fitting it well in the local setting with a $\bar{x}= 4.2$; however, it was “effective” in SKSU and NDMU.

In terms of financial support of the programs, provision of opportunities for change and provision of high educational needs and learning styles of the target audience, it was “effective” with $\bar{x}= 4.09$, $\bar{x}= 4.04$, respectively. However, it was “effective” in SKSU and NDMU. Generally, the program was “effective” having a grand mean (\bar{x}) of 4.16.

Productivity

The result reveal that while it was “productive” at NDMU ($\bar{x}= 3.71$) on the use of gained knowledge in farming and homemaking practices, in general result shows “highly productive” among the four HEI’s as shown in the obtain $\bar{x}= 4.23$.

The results further reveal that the programs were productive in terms of improved farming and technique skills in doing crop and animal production and other agri-related activities ($\bar{x}= 4.16$). But, for SBC and CFCST it was “highly productive” ($\bar{x}= 4.84$ and $\bar{x}= 4.28$, respectively).

Summary

This study was conducted to assess the Agricultural Extension Education Programs implemented by Higher Education Institutions (HEIs) in Cotabato Province. At total of 209 respondents from the four HEIs were selected as the respondents for this study. The respondents of the study were the program implementers, faculty and/ or staff, students, and beneficiaries of the agricultural extension programs of four HEIs involved, namely: Notre Dame of Marbel University (NDMU), Southern Baptist College (SBC), Cotabato Foundation College of Science and Technology (CFCST), AND Sultan Kudarat State University.

In summary, majority of the respondents were males; half of them were Ilonggos; less than half worked as program implementers in their school, less than half had master’s degree and served as implementers from 21 to 25 years.

Profile of the beneficiaries show that majority were males, had gross monthly income of PHP 1,000 and below, and had been benefitting from agricultural extension programs for 3- 4 years. Most were Ilonggo, from 16-20 years old, farmers, high school graduates and had been in the community for 6-10 years.

All four HEI’s in Region XII implemented livelihood programs. Among other programs, projects and activities implemented were sustainable development, environment and resource management programs.

The facilitating factors of the agricultural extension program during the implementation were participative and supportive partner communities.

Insufficient fund was found to be the major problem experienced by the agricultural extension implementers.

The programs implemented by the four HEI’s were found “effective”, “highly productive” and “sustainable”.

Conclusions

In the light of the above findings, the following conclusions are drawn:

1. It is therefore concluded that agricultural extension education is not a new pedagogy for the different HEIs of Region XII. The four HEIs have been implementing agricultural extension

education programs that have already taken deep root in the community where they are serving.

2. HEIs share almost the same concerns and focus with regards to extension education program, each has varied activities and means in implementing programs that are limited only to agricultural extension.

3. In the implementation of the program, although the greatest problem encountered was insufficient fund, it was not a block for the effective implementation of their programs. The different programs continue even with minimal funds.

4. On the part of the beneficiaries, they considered the agricultural extension programs of the HEIs effective, highly productive and sustainable.

Recommendations

Based on the results of the study, the researcher makes the following recommendations:

1. Intensify community extension programs by developing a paradigm that will serve as a model to all institutions that are implementing or planning to implement extension programs.

2. Conduct training and seminars for extension implementers.

3. HEIs should form networks and linkages for fund support for extension programs, project and activities. 4. Organize fora/forum for all extension program implementers to share best practices and strategies in extension program development and implementation.

5. Conduct follow up research especially on:

a) Factors effecting the implementation of extension education.

b) Extent of extension education implementation especially on conflict areas. This is to find out extent of effect of peace and order in the implementation of extension education.

c) Comparison on the extent of implementation of extension programs to those institutions that have enough funding and to those with minimal funding.

d) Comparison of strategies of good extension program as implemented by the different HEIs.

e) Conduct a research not included in the scope of this study.

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