RESEARCH ARTICLE

CALIBER MEASUREMENT OF MUSHROOM PRODUCTION COURSE OF TNAU.

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Abstract

Agriculture as an occupation is amphi-natured. Agriculture as a discipline is highly scientific and technical but the population that is engaged in this profession is quite contradictory. Majority of the respondents have only low level of education. Certificate courses of the DODL, TNAU were a boon to the people to have sound scientific and technical knowledge. Hence the quality of such courses has to be monitored often. Mushroom production course was chosen among the 21 courses offered and responses were collected from the successfully completed beneficiaries. This paper attempts to explain the effectiveness of the course with respect to six dimensions which would be very much helpful to develop the quality of the course and increase the coverage of people being educated through the institution in distance mode.

Introduction:

Unlike any other educational programs agriculture could not be effectively taught in normal teaching learning situation. It is a subject that requires many hands on experience for understanding of each and every principle. The agricultural education, research and extension wings together strongly believe in seeing is believing and learn by experience. Which in turn strongly prove that agriculture itself is highly skill oriented field? In the same way the farmers of our nation are in a critical condition to know scientific and technical practices to improve their own livelihood and to support the growing demand to feed the rapidly increasing the population. With these huge responsibilities the agricultural education institutions were striving hard to provide quality education to the needy people. Considering this responsibility it was even tougher to offer the agricultural course in distance mode. It is also quite challenging to offer the farming courses in short duration programmes with minimum face to face contact. It was not as easy to teach like routine educational program because it experience several barriers like heterogeneity of the students group with respect to prior educational qualification, gender, occupational status, etc. Education is the only means that can mould both career and mind. But that can also become ineffective and outdated without periodic evaluation and monitoring. To maintain the success and quality of the courses regular appraisal and modification should be done mandatorily. This paper attempts to measure and delineate the caliber of the certificate courses offered at Directorate of Open and Distance Learning under Tamil Nadu Agricultural University. In turn would help to strengthen or improve or maintain the quality and standard of the certificate courses offered.

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Review of Literature:-
Gunjal et al. (2010) concluded that nearly half of the respondent farmers suggested that share of practical components in the course content should be 51 – 75 per cent of the total content. Koul and Kanwar (2006) stated that at IGNOU, the courses are designed keeping in mind the established quality assurance practices and principles. Rogers et al. (2007) found that instructional designers’ or instructors’ awareness of the potential differences between cultures does not necessarily mean this knowledge is integrated into the design of online courses. Krishnapillai (2011) discussed about the benchmarks to be followed in open universities regarding face-to-face classes as learning package contain the schedule for face-to-face classes. The classes are not compulsory and are arranged at convenient timings/locations at established tertiary institutions (in the evenings, on weekends, etc).

Verma (2014) indicated that majority (97.22 %) of the respondents of post graduate courses on sugarcane technology were of the opinion that the available physical facilities in the university were adequate and supported for teaching. Gunfield & Ng (2013) concluded that ODL was as effective as face-to-face lectures. He also stated that concluded that instructional aids employed in the practical classes, majority of the teachers used slides (75.00%), photos and specimens (35.00%), marker board (33.33%) whereas minority of the teachers have employed chart (31.67%), models (23.33%), marker board (21.67%), followed by other methods. Tawo et al., (2008) equally stressed that, distance learning should adopt methods of instruction that meet the unique needs of the learners.

Bruning (2005) and Fresen (2007) considered interaction as an essential element to student learning and to the overall success and effectiveness of distance education. Abadio (2011) in his study reported that the major problem in distance learning is that the query is not getting resolved quickly by the institution. According to Jha et al, (2006) in distance learning, student support services is to be seen a ‘continuity of concern’ because it plays a crucial role in the performance and progression of learners from the time they enroll till their successful completion.

Research Methodology:-
The research was conducted purposefully at Directorate of Open and Distance Learning (DODL) of Tamil Nadu Agricultural University. The Directorate of Open and Distance Learning was started in the year 2005. Since then no attempts were taken to appraise the quality of the courses offered, hence a sincere attempt was made to analyze the course effectiveness. The courses being offered were certificate courses, B. F. Tech programme, PG Diploma and PG Degree through. Among which the certificate courses were chosen in particular for this study. Certificate courses were very much suitable for the heterogenous groups with varied demands. Midst of the 21 certificate courses offered at the DODL of TNAU, 17 were offered in vernacular language Tamil and 4 were offered in English among which mushroom production course which was offered in Tamil medium of instruction was selected without hesitation as it was highly flexible, skill based, technical, highest enrolled, highly preferred and has higher scope for entrepreneurship. Mushroom production course is related to cultivation techniques alone which have much scope for establishing commercial ventures. Hence it was purposefully selected for the study.

The list of the persons enrolled in the course from the year of starting was collected. The students who have successfully completed the course were only considered to be the respondents of the study. A well structured questionnaire was prepared and sent to 75 respondents randomly through post, and after providing a considerable amount of time for response, nearly only 38 respondents responded back in the given stipulated time hence the sample size for fixed to be 38 for this study. The course effectiveness was measured in terms of 6 dimensions like syllabus, course outline, course content, course material, Personal Contact Programme (PCP) and administration. Proportion of respondents based on their perception on each component was identified and classified into low, medium and high based on the cumulative frequency.

Results &Discussion:-
The highlights of the results that have emerged out of the study were enumerated in this part of the paper. The proportion of respondents based on their level of perception they possess over different dimensions of the course effectiveness was tabulated below in Table 1.
Table 1: Distribution of respondents according to the perception about effectiveness of mushroom production course based on various dimensions. (n = 38)

| S. No | Category | Syllabus | Course outline | Course content | Course material | Personal Contact Program | Adminstration |
|-------|----------|----------|----------------|----------------|-----------------|--------------------------|--------------|
|       | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| 1. Low | 3 | 7.9 | 1 | 26 | 7 | 18.4 | 3 | 79 | 8 | 21.1 | 4 | 10.5 | 7 | 18.4 | 7 | 18.4 | 4 | 10.5 | 5 | 13.2 |
| 2. Medium | 2 | 9 | 31 | 81.6 | 28 | 73.7 | 26 | 68.4 | 22 | 57.9 | 26 | 68.4 | 28 | 73.7 | 27 | 71.1 | 31 | 81.6 |
| 3. High | 6 | 15.8 | 6 | 15.8 | 3 | 79 | 9 | 23.7 | 8 | 21.1 | 8 | 21.1 | 3 | 79 | 7 | 18.4 | 2 | 5.3 |
| Total | 38 | 100 | 38 | 100 | 38 | 100 | 38 | 100 | 38 | 100 | 38 | 100 | 38 | 100 | 38 | 100 | 38 | 100 |

Syllabus was found to be least effective only by a minimum proportion of respondents whereas most of the respondents, nearly three fourth of them felt it to be satisfactory. They reported that the syllabus was error free with clear roles and responsibilities. It has perfect enumeration about grading and evaluation system, attendance requirements etc. course outline was also felt to be moderately effective as the balance between the theory and practical was well maintained to suit the distance mode. Practical sessions and the assignments assigned played a vital role in understanding the concepts clearly. But the respondents felt that the course could have arranged to have in depth hands on experience and to develop the critical thinking capacity to start and manage a successful venture.

Course content was also found to be moderately adequate with respect to the perception of the beneficiaries. They divulged that the subject was designed with content that is highly suitable for the distance mode. But they also opined that the course was simple and the institution has adequate facility to encourage the teaching learning environment, hence additional content with latest and updated technologies could be added to the course. They also pointed out that the business plan area could be improved better to effectively manage the enterprise in future. Course material quality was identified to be satisfactory among the beneficiaries. They indicated that the materials were made out of SIM (Self Instructional Module) hence it is very appropriate for self paced learning environment. They mentioned that the course material was designed with a sequential flow of information, with ideal illustrations and pictures. But they experienced that the course material should concentrate a bit more in self evaluation part of the material after each module in the course material.

The respondents of the study have also pointed out that the modes of teaching adopted by the teachers or the subject experts were good. They mentioned that they use interactive teaching methods and do not teach in monotonous ways like lectures alone or any other practices like dictation alone, or reading text in the class. But they expressed that only practical sessions could be made effective by having proper functioning, sufficient number of equipments and hands on practices through demonstrations, field visits etc. The beneficiaries pointed out that the teachers used only PowerPoint often and whiteboards, models and specimens occasionally for teaching. They felt that it is moderately effective for better understanding. Apart from this videos were also used to show some technologies and success stories.

They stressed that the facilitators cared a lot about the students understanding. They emphasized that the teachers arranged from the institution were very friendly to encourage discussion and raise questions. They said that the teachers had never criticized or embarrassed the students. As the teachers were arranged based on the availability or their presence on the day of PCP by their own department of AC & RI, Coimbatore, the students could not have a intimate relationship with the experts.

Respondents replied that the classrooms were provided with moderate level of amities. The classrooms were provided with basic facilities like proper ventilation, drinking water, sanitation, basic electrical gadgets like lights
and fans, LCD projector and screen, tables, desks, podium, computer and public address system. But they also divulged that the equipments like PAS experience problems occasionally which would interrupt the class hours. Apart from that they also indicated that it would be useful if they have internet facility through Wi-Fi in class rooms. They also mentioned that the institution has an excellent library facility and canteen facility. They reported that they could be provided with accommodation facility as most of them have to travel a long distance to attend PCPs.

**Conclusion:-**

Agriculture is the profitable occupation if done with scientific base. The certificate courses offered at DODL was designed in such a way to provide scientific knowledge to the people of diversified groups starting from fresh hands landing into agriculture. Hence there arises a need to evaluate the standards of the course, and the attempt to measure the caliber was made. Based on the results generated it was found that the course was moderately effective with little level of inconvenience. But it could be concluded that the institution has never compromised with the quality in technology delivery on seeing the success rate of the course based on the successful venture owners.

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