

BEYOND ACADEMIC CURRICULUM: EMBEDDING EMPLOYABILITY SKILLS IN AGRICULTURAL EDUCATION IN ASSAM AGRICULTURAL UNIVERSITY**Sri Rintu Saikia**

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ABSTRACT

Historically, education has been a determining factor of the progress of human civilization. The modern world is using education increasingly as an instrument for all round development. Education shapes the destiny of a nation. The quality of manpower in any country ultimately determines the sustainable well-being of its people. Creation of social opportunities for all sections of the society is a reflection of the progress of that society and education is the principal instrument for developing human capabilities by the up-liftment of knowledge and individual skills. Education, specially higher education not only improves the skill of students and make them employable, but it develops the whole personality of the individual if more outreach programs are introduced, offering wider knowledge. What are the skills expected by the employers of the graduate workforce? What competencies is 'Quality Education' capable of fostering in its products. What are the skills required for making the graduates employable? Is there a need for a continuous up-gradation of the curriculum in order to introduce the latest developments relating to various developments in the disciplines? What are the actual needs to be stressed such that education helps to create graduates who aim for near perfection pushing the existing limits of attainment in every sphere and develops their intellectual capital which is valued in the society? Education, as a liberating force, fosters growth, social equality and technological progress. So keen observation of every minute detail about University functioning and University operation, making necessary amendments and adjustments for suiting the needs of the modern time should largely be highlighted and planned by the Government and University authorities. This study tries to give a brief introduction for introducing the well established industrial management techniques in Higher Education.

Key Words: *Quality Education, Employability Skills, Competencies, Labor market demands*

Introduction

Soaring unemployment amongst agricultural graduates serves as a wake-up call to Assam Agricultural University in giving a relook at the diverse attributes students need to develop while at the university for easy transition into the agricultural profession. What skills do students need

to run the race of life? What can the university do to ensure its students have the skills, contacts and opportunities to improve their chances in the tough agricultural profession? Apart from their already gained skills and experiences from the family and personal lives, what additions they have to make in their knowledge, skills and competencies so as to employ themselves in jobs suitable to their level of graduation? What and how much competency apart from qualification does a graduate require to be employable? These questions arise while searching for a solution to the employability problem.

Assam Agricultural University has done a great job in providing world class facilities in its classrooms and laboratories. An agricultural degree is a fantastic start but students also need a plan for their future career as an agriculturist. Many of the students overcome significant constraints in the process of completing a degree. The University needs to consider what more it can give in the students invested time, and whether to integrate employability skills into degree courses from the first year in college. An employability skill refers to individuals' qualities and abilities to maintain employment and progress throughout the workplace. They are the skills, knowledge and attributes valued by employers and seen as critical to success in the workplace. These skills are essential for effective job performance. Employability in agriculture is not only about producing high-class agriculturist but also responsible citizens for the future. So inclusion of issues such as internationalization, research and innovation and emotional skills development within the agricultural curriculum would integrate employability. An extra-curricular activity that students undertake increases the value of education beyond the degree classification. It's tough being an agricultural graduate in today's economic climate. Assam Agricultural University is no longer simply a place to gain knowledge of agriculture for knowledge's sake, but a foot up on the career ladder. There's no denying that students have a strong vested interest in their future – so how is the university attempting to meet these demands? This study tries to find a link between the two and a solution for it.

Literature Review

Linus et al. (2004) present students' attitudes towards the overall curriculum content in bioresource and agricultural engineering, their career preferences after graduation, and the skills they considered would enable them to meet the expectations of prospective employers. Based on the total responses for various career and employment options, 48% of the responses preferred employment in a government ministry/department, 42% preferred employment in the private sector, while a negligible number of students (3%) wanted to start their own business after graduation. Most students expressed moderate to high confidence that their current educational programme would enable them to attain the critical skills required for success in their preferred workplace.

Donna L. Graham (2001) found that educational reforms have forced schools to form partnerships with business and industry to achieve common goals of a prepared workforce. These

partnerships have forced colleges of agriculture to examine its mission and update the curriculum. This study sought to provide benchmark data from employers on the skills and abilities deemed important and the level of preparation of recent agricultural and extension education graduates. Overall, graduates were prepared for entry-level positions; however, interpersonal skills could be improved to match the expectations of the employers. The skills of communications, teamwork, decision-making, leadership, and initiative were identified needing the greatest improvement. The access and use of the Internet was the most important computer skills. Employers rated honesty, integrity, and dependability as very important abilities.

Gholamreza et al. (2005) assessed the effects of vocational and technical higher education on the employment in the agriculture sector. The study found 41% of graduates were unemployed, 11.4% were employed fulltime and 32.4% of graduates were employed part time. About thirteen percent of graduates continued their education. More 77.5% of employed graduates held jobs in agricultural sector and 22.5% were employed in non-agricultural sector positions. Employed graduates indicated vocational and technical higher education prepared them for careers in the agricultural sector. Unemployed graduates stated that limitations in job opportunities in the agricultural sector were the main barriers to employment. The findings show a significant positive relationship between infrastructure, teaching ability of educators and trainers, teaching methods and educational content with graduates' job ability.

Jun Kong, Fan Jiang(2010) indicated that the graduates find jobs faster if they come from colleges with higher reputation. In addition, study shows graduates with engineering and business degrees find jobs more easily, next is major of arts and social science. The graduates with law and science degrees find jobs more difficult. Other majors have no significant effects on job finding. Finally, female graduates find jobs more easily than male graduates particularly before the final graduation date and 1-2 months after graduation. But none of the study shows how there can be an improvement in the employability of the graduates and how this can be achieved.

Research Methodology

Descriptive method of research was employed in this study. The questionnaire - checklist technique was used for the farmers, faculty and students to gather all the related data regarding their perception of readiness for regular and self - employment. On the other hand, selected farmers, university officials, faculty and alumni in Assam Agricultural University were contacted and interviewed for finding out the skill needs in the agricultural sector. Student's perceptions of their own competencies were also obtained through questionnaire survey of the fourth year students.

Objectives of the study

The agricultural graduates of Assam Agriculture University are facing a challenge confronting their employment readiness because of the “skills mismatch”, “job mismatch” and unemployment. This study seeks to determine the factors affecting the prospective Agriculture graduates for regular employment and self-employment. Specifically, it aims to determine if the development of Bachelor of Agriculture curriculum considered the following:

1. Whether the specific skills and competencies are identified and included in a curriculum.
2. The employment competencies and skill constructs most required by the agricultural profession are developed in the course specialization.
3. Identifying the manpower needs and future plans of the Agriculture profession and
4. The perception of the prospective graduates of their own employability skills

Practical implications

The study introduces the concept of employability particularly to students. This concept can be used by the faculty, employers, careers advisors and any other practitioners involved in employability activities for finding out the varying needs of skills in the dynamic labor market and bring necessary modifications to the curriculum according to demand. It may also be used to develop a measurement tool for employability and a ready reference of individual skills acquisition by students.

Data Collection

A questionnaire was prepared by interviewing randomly selected farmers, faculty and employees for identifying the employment competencies and skill constructs needed from an agriculture graduate. This questionnaire was distributed and data collected from randomly selected farmers, faculty and employees. Also a questionnaire survey form was distributed amongst the fourth year agriculture students to find their perceived competence to the employment competencies and skill constructs often needed by employers. Also the present and future plans and manpower requirements in agriculture and their assessment of tie ups with the farming community if there is one was included. The answers were tabulated and analyzed to identify appropriate analysis and recommendations. The willingness and perceived competence of the graduates to venture on enterprising in agriculture was found out. Suggestions to further enhance entrepreneurial mindset were also included on this part.

Summary of Findings

The Borich Needs Assessment Model was used to tabulate the results. This model calculates the mean weighted discrepancy (MWD) of needs assessment skills. An average weighted mean for each of the professional competencies was calculated by taking the sum of the weighted scores

and dividing by the number of observations. A discrepancy score for each competency was calculated by taking the Need rating minus the Self competency rating. A weighted discrepancy score was then calculated for each of the professional competencies by multiplying the discrepancy score with the average weighted mean of the Need rating. Based on the interview with the selected farmers and the survey with the prospective agriculture graduates, a discrepancy was found between the importance of employment competencies needed by the farming community and the perceived level of competence of prospective agriculture graduates have at performing the needed employment competencies. This study considered eight major employment competencies (fitness or capacities). (Four were general and is required in all industries, whereas the other four were specifically focused in the agriculture industry). The mean weighted discrepancy scores was used to rank these eight professional competencies.

Table 1: Discrepancies between the farming community rating on needed competencies and prospective agriculture graduates self competency rating

COMPETENCIES	Farming community Rating on Needed Competencies		Prospective Agriculture Graduates' Self competency Rating		Discrepancy Score	W D S	Rank
	AW M	Description	AW M	Description			
1. Change management	2.67	Major	2.13	Moderate	0.54	1.441	3
	2.72	Importance	2.15	Competence	0.57	1.550	2
2. Human resource management	2.87	Major	2.24	Moderate	0.63	1.808	1
	2.73	Importance	2.27	Competence	0.46	1.255	7
3. Communication	2.68	Major	2.30	Moderate	0.38	1.018	8
4. Self Management	2.77	Importance	2.30	Competence	0.47	1.302	6
5. Farm Management	2.69	Major	2.16	Moderate	0.52	1.398	5
	2.66	Importance	2.13	Competence	0.53	1.409	4
6. Crop production		Major		Moderate			
7. Livestock production		Importance		Competence			
		Major		Moderate			
8. Entrepreneurship skills		Importance		Competence			
		Major		Moderate			
		Importance		Competence			
		Major		Moderate			
		Importance		Competence			

AWM = Average Weighted Mean

WDS = Weighted Discrepancy Score

Rating: For the Farming community 0-not important, 1-minor importance, 2-moderate importance, 3-major importance

For the students: 0 - no competence, 1- minor competence, 2- moderate competence, 3 - major competence

Based on weighted discrepancy score (Table1), communicating, human resource management, change management were ranked first second and third. The rating shows that the curriculum failed on acquisition of the identified employment competencies. Since, these competencies are of major importance to the farming community, there is a need to prioritize them in curriculum development to bridge the discrepancy gap to make the prospective agriculture graduates ready for employment in the near future. The four general employment competencies were again subdivided into 18 specific skill constructs (Table 2).

Table 2: Discrepancies between the skill constructs needed by farming community and prospective agriculture graduates’ perceived level of competence

Skill Constructs	Farming community		Prospective		Discrepancy Score	W D S	Rank
	Rating on Skills	Description	Agriculture Graduates' Self Skills Rating	Description			
	AW M		AW M				
Change Management							
1. Conceiving ideas	2.78	Major Importance	2.11	Moderate Competence	0.67	1.862	11
2. Visioning	2.77	Major Importance	2.11	Moderate Competence	0.66	1.828	12
3. Risk taking	2.33	Major Importance	2.08	Moderate Competence	0.25	0.582	18
4. Creativity	2.91	Moderate Importance	2.22	Moderate Competence	0.69	2.007	8
Human resource management							
5. Coordinating	2.72	Major Importance	2.03	Moderate Competence	0.69	1.876	10
6. Decision - making	2.99	Major Importance	2.16	Moderate Competence	0.83	2.481	1
7. Leadership and influence	2.65	Major Importance	2.13	Moderate Competence	0.52	1.378	14
8. Managing conflict	2.67	Major Importance	2.08	Moderate Competence	0.59	1.575	13
9. Planning	2.63	Major Importance	2.29	Moderate Competence	0.34	0.894	16
10. Organizing	2.97	Major Importance	2.26	Moderate Competence	0.71	2.108	6
Communication							
11. Interpersonal relationship	2.59	Major Importance	2.29	Moderate Competence	0.30	0.777	17
12. Listening	2.93	Major Importance	2.13	Moderate Competence	0.80	2.344	3
13. Oral communication	2.96	Major Importance	2.24	Moderate Competence	0.72	2.131	5
14. Written communication	2.93	Major Importance	2.23	Moderate Competence	0.70	2.051	7

Self Management							
15. Life-long learning	2.66	Major	2.21	Moderate	0.45	1.197	15
16. Personal organization	2.96	Importance	2.20	Competence	0.76	2.249	4
17. Motivation- Personal Strength	3.00	Major	2.35	Moderate	0.65	1.950	9
18. Problem Solving and Analytic	3.00	Importance	2.19	Competence	0.81	2.43	2
		Major		Moderate			
		Importance		Competence			
		Major		Moderate			
		Importance		Competence			

AWM = Average Weighted Mean

WDS=Weighted Discrepancy Score

Rating: For the farming community 0 -not important, 1-minor importance, 2 -moderate importance, 3-major importance

For the students: 0 - no competence, 1- minor competence, 2 - moderate competence, 3 - major competence

The findings showed that decision making skills topped the list followed by problem solving and analytic, oral communication, listening and personal organization. Thus it can be concluded that graduates in agriculture should have the ability to make sound decisions and be able to identify those who will be affected by the decision made. They should be able to recognize and define problems, apply solutions and evaluate results. They should also be able to effectively present information, have listening skills and respond effectively to others problems and bring a balance between personal life and work. Thus the curriculum design should stress on the skill acquisition by the students for development of these competencies.

Table 3: Skill constructs under agricultural skill competency and the prospective agriculture graduates’ perceived competence

Skills Construct	Employers' Rating on Needed Skills		Prospective Agriculture Graduates' Self Skills Rating		Discrepancy Score	Weighted Discrepancy Score	Rank
	AWM	Description	AWM	Description			
Farm Management							
1. Record Keeping	2.71	Major Importance	2.41	Moderate Competence	0.30	0.813	19
2. Financial Management	2.57	Major Importance	2.24	Moderate Competence	0.33	0.848	17
3. Marketing	2.82	Major Importance	2.29	Moderate Competence	0.53	1.494	8
4. Computerization	2.62	Major Importance	2.40	Moderate Competence	0.22	0.576	20
5. Labor Management	2.59	Major Importance	2.15	Moderate Competence	0.44	1.139	13

Crop Production							
6. Plant Nutrition and Growth	2.83	Major Importance	2.26	Moderate Competence	0.57	1.613	5
7. Fertilization	2.79	Major Importance	2.44	Moderate Competence	0.39	1.088	15
8. Land Preparation	2.65	Major Importance	2.34	Moderate Competence	0.31	0.821	18
9. Diseases and Pest control	2.91	Major Importance	2.42	Moderate Competence	0.49	1.425	6
10. Planting and Harvesting	2.89	Major Importance	2.42	Moderate Competence	0.47	1.358	9
Livestock Production							
11. General	2.82	Major Importance	2.11	Moderate Competence	0.71	1.902	1
12. Feeding	2.66	Major Importance	2.13	Moderate Competence	0.53	1.409	7
13. Housing and handling	2.58	Major Importance	2.19	Moderate Competence	0.39	1.006	16
14. Diseases and pest of animals	2.83	Major Importance	2.14	Moderate Competence	0.44	1.245	11
Entrepreneurship Skills							
15. Market Forecasting	2.64	Major Importance	2.19	Moderate Competence	0.45	1.188	12
16. Opportunity identification	2.73	Major Importance	2.33	Moderate Competence	0.40	1.092	14
17. Financial planning	2.67	Major Importance	2.19	Moderate Competence	0.48	1.281	10
18. Value adding and marketing	2.91	Major Importance	2.33	Moderate Competence	0.58	1.687	4
19. Exposure in field business	2.83	Major Importance	2.16	Moderate Competence	0.67	1.896	2
20. Business planning	2.93	Major Importance	2.30	Moderate Competence	0.63	1.845	3

AWM = Average Weighted Mean

WDS=Weighted Discrepancy Score

Rating: For the farming community 0-not important, 1 -minor importance, 2-moderate importance, 3 -major importance

For the students: 0 - no competence, 1 minor competence, 2 moderate competence,3 - major competence

Table 3 shows that prospective agriculture graduates have high discrepancy level of competency in the area of livestock production, general ability, field business exposure, business planning, value adding and marketing, diseases and pests control of crops. This means that the students need more practical training to manage livestock production. The university can facilitate more

business or enterprise exposure through partnership with the professional farmers and agricultural processing industries. The students are to be trained on value addition in agricultural products and develop marketing skills. The students should be more exposed and familiar with the pests and diseases affecting crops and their treatments. The curriculum developers should consider designing programs and lessons plans aimed at eliminating the discrepancies.

However – above all – the research findings highlighted that the students themselves has to take responsibility for the development of their own employability skills and has to place themselves at the center of the process. There were little or no provisions in the academic process for inclusion of activities in the curriculum which develops these much required skills. So in order to understand how this may be achieved most effectively and to better appreciate the student perspective on employability skills, it is essential that student opinion is more actively investigated and tracked along with the feedback from the prospective professionals.

Removing the discrepancies and expanding the Horizon of the agricultural curriculum

Assam Agricultural University should take the role in promoting the extensive inclusion of employability skills through feedback controlled, integrated academic, laboratory and farm work experience based learning into its agricultural curriculum. These hands-on field experiences develop positive impact on learning outcomes and increase the confidence of the students. Employability can be effectively assessed where the specific skill and its application are clearly stated and described in the course materials and learning objectives, within the context of a given syllabus. Curriculum and course design should make clear the requirements for employability skills and provide details of how and at what point in the course they are to be addressed. Workplace supervisors should assess and provide feedback on a student's employability skills through reports to be used by (1) the university to determine the usefulness of teaching practice and (2) the students on their performance. This assessment may be through observation in various settings, performance of work groups, seminar presentations, providing written responses to scenarios, and behavior in interviews. The University should link the academic and practical experience in such a way that students will be expected to indicate how their courses will contribute to long term employability or in other words students are required to set the boundaries of their own curriculum.

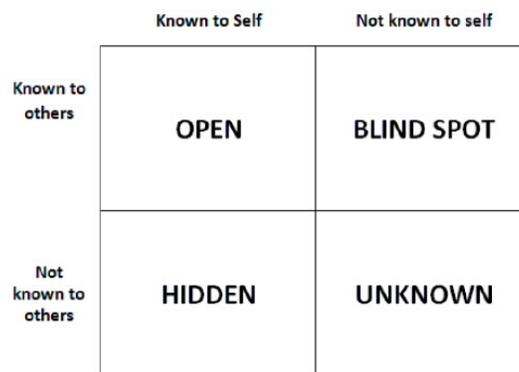
Impact on the Students

Students are students, young and enthusiastic, with very high expectations. They are geared to a common goal: if not further training or education, then guaranteed employment. The same students want to have fun, they want to enjoy themselves, and they want to make the most of higher education. They're full of enthusiasm, full of excitement, and determined to have a good time.

How can the University tailor the curriculum to the student's lifestyle and extract the best out of every student to have a well-balanced development of knowledge, skills and personality? The

University should move a step away from a “command and control” model of the academic system to a more “cultivate and coordinate” model, where faculty can use latest innovations and technologies to help students visualize, learn and create knowledge on their own and apply them in situations where nobody thought of applying, thereby creating innovation to utilize their talent in a more expanded field where knowledge can be used as a resource in the dynamic labor market. Well established industrial management techniques may be used to enhance the skills of the students. They are:

1. **Johari Window**¹: Students need to take responsibility for reviewing or assessing their own employability skills, addressing gaps and then pursuing appropriate ways to report or present relevant information about their skills to employers. The model can be used as a tool to foster self-awareness and understanding of group processes and interaction. The window is illustrated below and has four quadrants or panes. The Open pane is the part of ourselves that we see and others see. The Blind Spot is the aspect that others see but of which we are not aware. The Unknown is the unconscious or subconscious side of us, seen by neither ourselves nor others. The Hidden pane is our private space, which we know but keep from others. Receiving feedback enlarges the Open quadrant by reducing our "blind spot". The receiver of the feedback learns things about themselves of which they were previously unaware. This applies to both the student and the educator. It is possible to increase the Open pane and reduce the Hidden pane through self-disclosure. Sharing something of ourselves, previously unknown to the student, may assist in the development of trust. This is useful in developing a relationship with the student so they feel comfortable and safe and learning is enhanced.



The Johari Window (Luft, 1969).

2. **Developing emotional skills:** Deniel Goleman’s concept of Emotional Intelligence² overlays with other people’s descriptions of personal mastery. Goleman sees four key pillars of Emotional Intelligence: Self-Management, Self-Awareness, Social Awareness,

¹The Johari Window and the Dark Side of Organizations Author : Stewart Hase, Alan Davies and Bob Dick

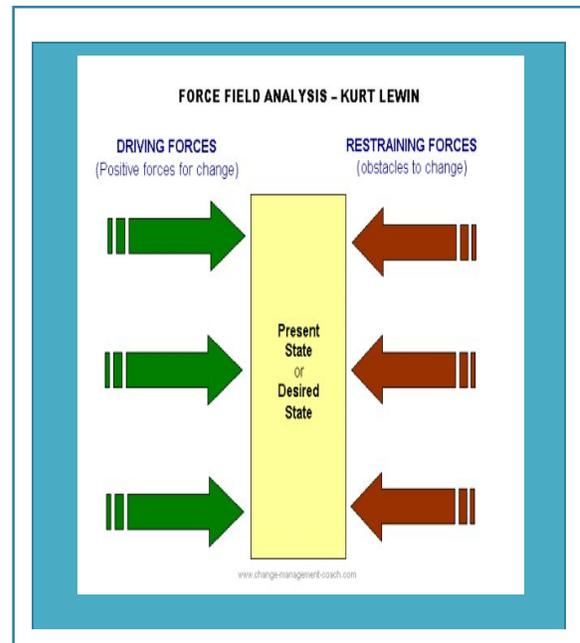
²Background to Daniel Goleman’s concept of emotional intelligence <http://www.imarks-web.com/aws/view.php?>

and Social Skills. In learning, the concept of reflective practice is probably the most helpful skill that helps us develop Emotional Intelligence. In other words:

1. The conscious practice of reviewing our successes and mistakes.
2. Deciding to learn from both: How to improve our practice in the same area of need, and
3. How to transfer the learning to new areas of need.
4. Ensuring that this learning becomes an unconscious part of our skill set over time (unconscious competence) so that we have the 'space' to learn new things.

The big point from Gardner's research is that since people learn in different ways, we can do several things to improve our 'reach': work on several intelligences at the same time. Tailor our approach to the individual where this is possible and useful. Employ different teaching techniques such as seminar presentations of experience in field work related topics, case discussions, video demonstrations, and an in-class simulation - emphasizing a participatory style to maximize the opportunities for "learning by doing".

3. Use of Force field analysis: The Force Field Analysis is flexible enough to be used as a self evaluation tool across a range of contexts. The technique encourages students to think through the current situation as it stands and to then describe the situation as they would like it to be. Issues are then identified and quantified that either support or prevent the shift from where they are now to where they want to be in relation to their overall objective. These issues might be personal and/or environmental and might include aspects such as: skills, motivation, experience, qualities and knowledge, time, other people, power, confidence, resources, both personal and material. Consideration of the relevant strength of these issues in helping or preventing, allows students to more readily identify: what they might change and how they go about it. With a strong emphasis on putting knowledge into practice, the agricultural curriculum should comprises three major learning streams: strategic global thinking, results-based decision-making, and interpersonal leadership in a diverse environment. Build global perspectives, and the knowledge necessary to compete productively on an international scale. They must learn frameworks to assess the impact of risks and decisions in agricultural production, and learn to lead change and manage across cultures. The course should embody the critical elements, causal loops in the agriculture production market to innovation, value creation chains, supply chains, and



marketing. They must also realize their unique ability to integrate advanced research, new technology, and innovative business practices and make the University an ideal collaborator in technology dissemination. The challenge for the university is to find a common language that will enable it to look at innovation and product development as an integrated chain, from what is happening in the agricultural field to what happens in the agricultural research laboratories on through to the production and agricultural farm production operations. The experiential learning should be designed around the four key principles of—smart work design, creative problem solving, and continuous knowledge sharing, and developing of discovery skills among the students.

4. **Taguchi Methods:** This method uses statistical concepts and tools for improving quality. Taguchi defined quality in terms of loss to the society. A poorly conceived and designed product begins to impart losses to society from the embryonic stage and continues to do so until steps are taken to improve its functional performance. Taguchi approach advocates for building good quality by designing it into a product instead of inspection. The product should be so designed that it is immune to uncontrollable environmental factors. This method emphasizes that poor quality cannot be improved by the process of inspection, screening and salvaging. No amount of inspection can put quality back into the product, it merely treats a symptom. So the method stresses that quality is what one designs into a product. The method uses especially constructed tables known as orthogonal arrays. The use of these tables makes the design of experiments very easy and consistent. The method can be effectively used for designing curriculum contents such that the learning of the students are robust and are not affected by the environmental factors that puts a barrier and hampers the students learning process.

Faculty: driving the future of the students

The faculty should be trained leaders in agricultural technology and application. They must conduct forward-looking research in their fields and have extensive exposure and experience in putting the findings of their research into practice. They should have good communication skills and be exposed to critical issues that require both the latest thinking and in-depth professional experience. Faculty should rely on leading edge technology. Faculty from different colleges and departments should work together seamlessly on multidisciplinary innovations. Thus create some of the best experts in a vast array of agricultural subject specialties. They should have access to pioneering research centers and latest breakthrough discoveries. Most importantly, faculty should have extensive experience integrating multiple agricultural disciplines into one powerful learning experience for the students. Exploring this critical intersection of education, management, science, and technology would give the faculty in AAU an edge for entrepreneurial success through interdisciplinary collaboration.

Developing entrepreneurial agricultural ecosystems through curricular involvement

The students should be taught Entrepreneurship Development by educating, engaging, and enabling student teams from key regions and implementing an acceleration strategy to harness the power of innovation and entrepreneurship and accelerate growth in their region's ecosystem through involvement. Build interdisciplinary teams to derive project formulation of regional production, processing and marketing of agricultural products, strategies for implementation and find its impact on the regional economy. Leverage the students understanding of key drivers of successful innovation driven entrepreneurial ecosystems to design and implement key regional programs and policies, informed by AAU research and global best practice. Deploy AAU rigor and use frameworks to deepen analysis and evaluate their current regional entrepreneurial ecosystems. Compare and learn from other organizations globally like the High-Impact Tools³ used by MIT Sloan School of Management which are :

1. **Integrated curriculum:** A dynamic fusion of rigorous content, tools, and strategic frameworks to maximize learning and dovetail with local agricultural needs, challenges, and objectives.
2. **“Deep dive” experiences:** Immersive learning mechanisms allowing students to zero in on specific agricultural problems and issues.
3. **Action learning projects:** Students put the latest research into practice through in course project teams which address real farm requirements and make recommendations for action.
4. **Targeted goals:** Experiential learning designed around specific farmers goals set by the faculty.
5. **Reciprocal learning:** Students get vital knowledge and perspectives from one another and build healthy alliances that serve them for years to come.
6. **Virtual collaborations:** Students distributed in multiple locations stay connected throughout the process with technology enabled learning platforms.
7. **Continuous feedback:** Faculty input, professional representatives, and program participants shapes the evolution of the program.
8. **High-powered team:** Students, faculty, and program staff together should create a productive, enduring network. Today cooperative learning, adaptation, innovation, change, and growth has a great importance.

Conclusions and Recommendations

Assam Agricultural University has found a place amongst the top 100 universities in India and is ranked the 5th position of the Agricultural Universities in the country. But to retain the position or move ahead to the top 10 Universities of the country, or to be in the limelight of the world class Universities it has to do much more. To achieve such exceptional excellence it has to work

³ MIT Sloan Executive Education Custom Programs innovation@work Massachusetts Institute of Technology MIT Sloan School of Management <http://mitsloan.mit.edu/execed>

on —time to market, quality, safety, affordability, reliability and responsiveness, dependability and adaptability, such that it improves continuously and be ahead of their rivals. Though it seems tough, it can be done by utilizing the talent, sincerity, devotion and hard work of everyone involved where individual problems are solved through collaborative efforts in the University. Thus it will create an organizational culture where work is done by harnessing the best-known approaches available and signaling the need for new knowledge, solve problems as they arise and develop new understanding that prevents the problems from recurring. Multiply the impact of local discoveries by making them useful systemically throughout the organization. Bring an organization culture where discovery is encouraged, supported, and promoted at all levels and all times and where there is the intersection of skill and effort and make a funny place to work.

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