

ASSESSING TRAINING CONTENTS, CURRICULUM AND PROCESS OF AGRI-ENTREPRENEURSHIP DEVELOPMENT FOR FARMERS

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Abstract

There is a lot of saying about farmers becoming ‘entrepreneurs.’ But what is an agri-entrepreneur and what is agri-entrepreneurship? How can agri-entrepreneurial skills be developed? How do agri-entrepreneurial farmers respond to change their farming enterprise? How can extension workers help farmers to develop agri-entrepreneurial capacity? These questions are still unexplored in Bangladesh. The objectives of this study were to assess the existing agri-entrepreneurship development training manuals for the purpose of identifying better yet unexploited contents and curriculum in facilitating sustainable entrepreneurial skills and attitude of farmers, which will contribute to growth in agribusiness and income for farmers of the country. The methodology included document collection, key informant interview (KII), and literature review and analysis. The managerial skills and entrepreneurial spirit of farmers are essential for agri-entrepreneurship; rural farmers have a high potentiality of agri-entrepreneurship; however, they are facing challenges to gained formal entrepreneurial training and supports, and extension workers must provide demand-driven training and advisory services to enhance agri-entrepreneurship. Investing in agri-entrepreneurship can open a new horizon of agricultural development.

Keywords: Agri-entrepreneur, Entrepreneurship Extension worker, Farmer

Introduction

The economy of Bangladesh is highly dependent on agriculture. Since about 87 percent of rural households rely on agriculture for at least part of their income (World Bank, 2006) that clearly indicates the poverty reduction potential of the agriculture sector. Despite the fact that Bangladesh has shown good achievement in agriculture development, the country still depends on subsistence production systems largely dominated by small and marginal farmers. (World Bank, 2017). The world is moving from local markets to national and global markets, meaning our farmers may be competing with neighboring entrepreneurial farmers from another country, which is increasing pressure on farmers to commercialize their operations (Ferris *et al.*, 2012). The Bangladesh government has taken initiative to commercialize the agriculture sector, but though few farmers have entrepreneurial spirit, many of them do not have educational entrepreneurial skills in the country (Ferris *et al.*, 2012). These farmers are not

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innovative, do not take risks and lack the drive with an entrepreneurial spirit. Actually, the farmers are facing challenges to gain entrepreneurial capacity for limited access to entrepreneurship training and support (Kahaan, 2012). The extensionists also face limitations to identify better curriculum for the potential farmers who want to be an entrepreneur. Therefore, it is the time for developing the entrepreneurial capacity of farmers. The purpose of this study is to assess and screen out the better contents, curriculum, and process for redevelopment of the agri-entrepreneurship training module for farmers of our country, so that any extension worker can be prepared for the agri-entrepreneurship development module for providing entrepreneurial training. Different NGO workers and Sub-Assistant Agriculture Officers (SAAOs), Department of Agricultural Extension (DAE) can also use these contents for further development of agri-entrepreneurship development modules.

Materials and Methods

The methodology was used in three steps: secondary study with document collection, primary study with Key Informant Interview (KII), and data review & analysis and reporting. The first two steps were done simultaneously. Meeting and collecting the available entrepreneurship development training manuals from different Government and NGO Offices, then collecting existing similar manuals from other entrepreneurship development organizations from websites and directly from public departments as the secondary sources. Conduct KII with some experts on agricultural management or entrepreneurship such as Food and Agriculture Organization (FAO), International Labour Organization (ILO), etc. who have knowledge on the intended documents as primary sources. The collected materials and data were reviewed and analyzed in similar manuals, reports and hand books. The existing information on entrepreneurship development training contents, curriculum and process has been summarized and compiled, later on to be elaborated for the assigned training module by extensionists or NGO workers.

In order to review the existing information on agri entrepreneurship, related modules were collected from different sources. The collecting materials from different projects are: 1 Business skills and entrepreneurship development training and planning manual (Edward, 2018). 2 Module: Agricultural Entrepreneurship (Ferris *et al.*, 2012). 3 Entrepreneurship in Farming (Kahaan, 2012). 4 Agri-Entrepreneurship Training Manual, Nova Scotia Agricultural College Truro, Nova Scotia, Canada, funded by Canadian International Development Agency (CIDA), 5 Entrepreneurship Development Training Manual (Neubert, 2016) and 6 Start and Improve Your Business (SIYB), International Labour Organization (ILO). The collected documents from web links are: 7 The Module: Entrepreneurship Competence (Tutlys, 2016). 8 Training Module on Entrepreneurship (Mullanji and Topalli, 2017). The collected documents from the public departments are: 9 Doing Business in Bangladesh, A Guide of Investment Rules, Bangladesh Investment Development Authority (BIDA), 10 Bangladesh Investment Handbook. A guidebook of Investors, Bangladesh Investment Development Authority (BIDA), 11 Entrepreneurship Development Training ToT Manual for Upazila Officers, Small and Cottage Industries Training Institute (SCITI). (Hereinafter manual name referred to the module 1 to 11). During the collection and review it was focused particularly on businesses of individual

farmers with proper investment and concentrated only on formal farmer training manuals which included DAE principles such as increasing production and productivity, cost effectiveness, bottom-up planning, development of agri-business, adoption to climate change etc. (NAEP, 2012). Therefore, the above 11 modules are reviewed by the team. Authors jointly performed the screening process of the contents from existing modules and the analysis to draw major findings and reporting.

Results and Discussion

The study findings are described in different sub sections. The subsections are overview of the entrepreneurship development training (contents with observations) of reviewed documents, training duration of the reviewed modules, different training methods used in the different manuals, content analysis, proposed contents/sub contents (curriculum), and proposed training delivery process by this curriculum. These subsections are illustrated below sequentially:

Overview of the entrepreneurship development training of reviewed documents

During review, major training contents found in module 1 are overview of the business skills and entrepreneurship development training, introduction to business, and entrepreneurship development, business planning data collection, aggregation of projection, sustainable business model- organization, leadership and operation and enterprise management skills: marketing, production, enterprise or organizational and financial management skills. The observations are that this manual is for farmer's organization, focused on entrepreneurship development through agriculture value chain development. Contents of module 2 are agricultural entrepreneurship, introduction to agripreneurship, the role of the extensionist in agripreneur development, criteria for a successful business, evaluating entrepreneurs, defining the business idea, identifying markets, managing key activities and partners, business planning, the basics of sales, assessing risk, record keeping, building a business relationship, putting plans into action and monitoring. The major observation is that it includes working with individual farmers to develop farm plans, as well as working with farm organizations in areas of market analysis, financing, sales and building business opportunities for farming clientele.

Major contents found in module 3 are understanding entrepreneurship in farming, entrepreneurial responses, entrepreneurial qualities, building entrepreneurship skills, and extension support for developing entrepreneurial capacity. The module is a guidebook of new extension workers that includes a better understanding of the concept and practice of entrepreneurship by which extension workers will be better able to help farmers develop the skills and spirit of an entrepreneur. Contents found in module 4 are group formation and strengthening, postharvest handling system, marketing, record-keeping, financial management, participatory learning, and case studies (on post-harvest management). The module emphasized on group formation and leadership, postharvest methods of agri-products and their marketing and has been designed for use in northern Ghana. It has included a trainer's guide for participatory learning and action which is comprehensive for trainers to provide training farmers with participatory methods. Contents found in

module 5 are effective facilitation, understanding basic concepts of entrepreneurship, generating a business idea, developing a business plan, marketing, costing and pricing, operational management, record keeping etc. Major observations are that this module focused for youth, women, trainers and mid-level professionals on entrepreneurship used mainly in Eastern Africa (Ethiopia, Kenya, Tanzania and Uganda) (Neubert, 2016). It includes the detailed business planning process which is essential for the success of an entrepreneur.

Contents found in module 6 are generating business ideas, business plan, marketing, costing, buying and stock control, people and productivity, record keeping, planning for business etc. The observations are that Generate Your Business Idea (GYBI) is a training programme for people who want to start a business but are not sure of the business idea to pursue. It assists potential entrepreneurs to identify different business ideas, to analyze them and select the most promising one. In the module 7 the contents found are meaning and definition of entrepreneurship, contents of competency and skill, development of the business idea, business plan for a farm, business visits, assessment of business competencies, and references of sources of business services. The major observations are that this document is focused on agricultural farm business for all levels of trainees, includes generating business ideas which are more feasible and emphasizes on good and bad examples on starting a new business. Contents found in module 8 are the lifestyle of an entrepreneur, working challenges, exploring youth entrepreneurship, being your own boss, communication, introduction to entrepreneurship, entrepreneurship education, successful enterprise, my entrepreneurial competencies, social enterprise etc. The main observations are that the module is mainly for youth entrepreneurs aged 15-35 years old. This is basically a workshop and exercise-based module, on entrepreneurship for Training for Trainers (ToT), which was held in Durres, Albania (Mullanji and Topalli, 2017). Contents found in module 9 are investment opportunities in Bangladesh, investment climate, cost components of various inputs to production, registration of companies and firms, registration of industrial projects and other services, exploring from Bangladesh rules, procedures etc. This manual is mainly for investors, focused on investment rules in Bangladesh. This is also a guidebook for export and import.

The major contents found in module 10 are business climate and opportunities, starting a business, cost of doing business, paying taxes, applying for visa, sectors overview etc. It was observed that this manual is a guide for all kinds of investors and delivers up-to-date information on business climate, processes required to start and operate a business, tax/policy regimes, incentives and comparative advantages including visa rules. Finally, the major contents in module 11 are entrepreneurship attributes, concept of business, trade selection process, small and micro enterprise development, marketing, production, organizational & financial management, business plan preparation, loan processing and the major observations for this module are that the module is developed for ToT of Upazila Govt. Officers on entrepreneurship, focused on rural and urban educated but unemployed youth, men and women.

Training duration of the reviewed modules

Most of the training manuals are developed for 3 to 5 days duration. However, “Start and Improve Your Business (SIYB)” has many contents where the duration of training was not mentioned clearly.

Different training methods used in the different manuals

The following methodologies have been used as the training methods in different manuals or modules and handbooks, which are reviewed by the team. The majors are lecture, open discussion, demonstration, PowerPoint presentations, poster paper or flipchart presentation, practical sessions, group work and group presentation, brainstorming for solving the problems, case study sharing, tool or format sharing, role-playing, small group discussions, simulations game, and ice breakers.

Content analysis

The most interesting contents of different modules are sustainable business models, which includes value = benefits-costs, where risk factors are considered with costs for new entrepreneurs either agricultural farmers or other off farm entrepreneurs. Some modules can be used to train diverse groups particularly for the farmers, some might be useful for those who particularly want to generate new business ideas, acquiring good and bad experiences on starting a new business. The government document is very essential to know investment opportunities and government subsidies or financial aid or incentives for farmers due to their lack of access. As the small farmers are majority new entrepreneurs the risks and challenges of entrepreneurship should be kept in the proposed training module. However, the different contents in different modules on agri-entrepreneurship are analyzed in Table 1 below and considering this analysis and above discussion, the author team proposed the contents mentioning which manuals are also given in the right column in the same Table.

Proposed contents/sub contents (curriculum)

Reviewing the relevant documents and analyzing as well as findings from the documents, we would like to propose the following contents/sub-contents as curriculum. However, the proposed contents for the intended training for farmers including objectives are given Table 2.

The major contents in the proposed curriculum are kept related to entrepreneurship development contents with sub contents. According to the above table the overall curriculum of the proposed module is divided into ten sessions. Session 1 is the start of the training followed by an opening session and a pre-evaluation test to understand the primary knowledge of the participants on agri-entrepreneurship. The session 2 to 8 will deal with different entrepreneurial-related topics focused on the practical skills that entrepreneurs need to have to set up a successful agri-enterprise.

The sessions mostly focus on basic concept of entrepreneurship and agri-entrepreneurship, ways of identification and selection new agri-business ideas, proper start and successfully manage an agri-enterprise/business, developing detailed Business

Table 1. Content Analysis

Content	Reviewed documents*											Proposed contents
	1	2	3	4	5	6	7	8	9	10	11	
Introduction to business and Entrepreneurship development	√			√	√	√	√			√	√	√
Introduction to agripreneurship		√										√
Agricultural entrepreneurship		√										√
understanding entrepreneurship in farming			√	√								√
Identifying markets, mapping resources and partners in a business,		√										√
Generate business idea					√				√	√		√
Types of business institutes					√			√				√
What is successful business / characteristics of successful business / Success story of agri-business		√	√	√	√	√		√	√			√
Evaluating entrepreneurs (clients)		√										
Business plan	√	√	√	√	√		√	√	√	√		√
Marketing management	√	√	√	√			√		√			√
Production management	√	√	√				√					√
Financial management	√	√	√				√					√
Organizational management	√	√	√				√					√
Operational management	√				√							
Costing				√	√				√			√
Pricing and profit					√							√
Buying and stocking				√	√							
Record keeping				√	√				√			√
Institutes in assisting business establishment, training institutes and necessary business weblink								√				√
Working challenges (for business)		√				√					√	√
The role of the extensionist in agripreneur development		√										√

* The module 1 to 11 were illustrated in the section “Materials and methods”

Table 2. Proposed Content/Sub-content with objectives:

Session number: Sub-contents Contents	Objectives
Session 1: Inauguration of the training <ul style="list-style-type: none"> ▪ Opening and introducing ▪ Clarify participants expectations and concerns ▪ Understanding on overall objectives of the training ▪ Establish norms for conducive environment and active participation ▪ Pretest evaluation. 	Farmers will introduce each other, able to understand the overall objectives and provide their expectations from the training
Session 2: Basic concept of business/entrepre neurship <ul style="list-style-type: none"> ▪ What is entrepreneurship? ▪ What is agri-entrepreneurship? ▪ Who is an entrepreneur? ▪ Characteristics of good agri-entrepreneur ▪ Types of entrepreneurs based on size and institution ▪ Benefits of entrepreneur/agri-business ▪ What are the legal requirements for doing the agri-business (trade license is enough for a small agri farm)? ▪ Anyone can be an agri-entrepreneur (youth, men, women, physical disorders etc.) ▪ Challenges to start a business and possible solutions considering farmer idea ▪ Case study (success and failure story on operating agri-farm) 	Farmers will be able to understand the basic concept of entrepreneurship, agri entrepreneur, legal requirement of any agri-enterprise.
Session 3: Generating business idea and selection of specific agribusiness <ul style="list-style-type: none"> ▪ What is an agribusiness idea? ▪ What makes a good business idea? ▪ Example of different agri- farms and agri-businesses ▪ How to find a good agri-business idea? ▪ Generate your own agri-business ideas? ▪ Analyze agri-business ideas and select best one 	Farmers will be able to generate knowledge on agribusiness idea and can be select best one based on their capacities and local markets
Session 4: Developing agribusiness plan <ul style="list-style-type: none"> ▪ What is a business plan? ▪ Why is an agribusiness plan necessary? ▪ Agribusiness plan (production plan, marketing plan, organizational plan and financial plan) ▪ Practicing Agribusiness plan (on-farm business plan) ▪ Reference organization for improving agribusiness 	Farmers will be able to know about business plans and achieve the skills on “how to develop an Agribusiness plan”. The Extensionist will be introduced with reference organizations for improving agribusiness.

Session number: Sub-contents Contents	Objectives
Session 5: Costing of goods <ul style="list-style-type: none"> ▪ What are the costs? ▪ Importance of costing in agribusiness ▪ Types of costs ▪ Method of calculation of per unit cost 	Farmers will be able to understand costing, importance of costing and capable of calculating per unit cost.
Session 6: Pricing and profit <ul style="list-style-type: none"> ▪ What is pricing? ▪ Factor influence pricing ▪ Price setting and profit calculation 	Farmers will be able to know about pricing, factors influence pricing and can set price for profit
Session 7: Marketing for small farm business <ul style="list-style-type: none"> ▪ What is marketing? ▪ Who are customers? ▪ What are their needs? ▪ 4 Ps (Products, Price, Place, Promotion) ▪ Marketing process 	Small farmers will be able to understand marketing and meet customer demands through the marketing process.
Session 8: Record keeping and accounting <ul style="list-style-type: none"> ▪ What is a record? ▪ What is record keeping? ▪ Importance of record keeping ▪ Types of record ▪ How can records improve your business? 	Farmers will be able to know about record and record keeping, its importance and how records can improve the business.
Session 9: Planning and Closing <ul style="list-style-type: none"> ▪ Farm plan for next season ▪ Post evaluation test ▪ Recap of the 3rd day and entire training ▪ Closing of the training. 	Farmers will acquire practical knowledge on planning and be able to make their individual initial plan for next season which will greatly contribute to the success of the training.
Session 10: Participatory learning and effective communication <ul style="list-style-type: none"> ▪ What is participatory learning ▪ What is facilitation ▪ Importance of participatory learning ▪ Participatory learning process, tools and method ▪ What is communication and types of communication ▪ Effective communication skills. ▪ How to communicate effectively. 	The extensionist or NGO worker will be able to realize basic concepts on participatory learning, facilitation and effective communication, so that they will be capable of further development of the module and acquire skill on conducting the training directly towards the farmers.

Plan (BP), analysis of costing with per unit cost of agri-product, ways of attractive price setting and profit calculation, process of keeping record and account for a business, linkages between the entrepreneur and all the resources and services actors needed to

successfully continue an enterprise. Session 9 is a planning and concluding session, where participants are given an individual planning format to develop a future plan of what an individual entrepreneur will do by next season. After this a post evaluation test will be conducted for all participants to compare with the pre-evaluation test and then accordingly conclude the session with a closing speech as well. Another, the session 10, is only for extension workers for their ToT for better understanding the approach, tools and participatory learning process, facilitation and effective communication. It will serve as a practical guide for facilitators to elaborate modules with contents as well as conducting process of training, so that the extension workers can facilitate entrepreneurship training based on the participatory learning approach.

Proposed training delivery process by this curriculum

The major discussions in review show how an agri-entrepreneur is different from traditional farmers, the finding showed that an entrepreneur is any person who creates and develops a new business idea and takes the risk of setting up an enterprise to produce a product or service which satisfies customer needs and wants (Kahaan, 2012). Entrepreneur refers to the person and entrepreneurship defines the process. All entrepreneurs are businesspersons, but not all businesspersons are entrepreneurs. An agri-entrepreneur is therefore an agri-business-minded farmer who always finds the ways to improve the business. In the entrepreneurship point of view the first is the managerial skills needed to start and run a profitable farm business by farmers and the second is 'entrepreneurial spirit' of farmers (Kahaan, 2012). Both are important and need to be matched for agri-entrepreneurship. Thus, training delivery methods should be changed from traditional methods. Therefore, the proposed method is to increase business management skills and technical skills of individual agri entrepreneurs.

Traditionally, most extension agents, especially those supported by Governments and NGOs have focused on helping farmers to work in a group approach, to grow more produce, but there some lacking to develop agri-enterprise options with an individual approach (Babu *et al.*, 2021). The farmer group support model should not be considered as outdated, this approach has good results around the world, in producing diverse products derived from customer needs (Ferris *et al.*, 2012). However, this model is not the 'only' approach, we offer a complementary approach, which seeks to support the more individualistic agri-entrepreneur. Therefore, the proposed contents are used for module development by extensionists for training of individual agri-entrepreneurs. First as a trainer the extensionist or NGO worker will be received ToT from projects operated by either Government or NGOs. After receiving ToT, they will prepare a module by using proposed contents as well as curriculum. After developing the module, a three days long training schedule will be developed mentioning time, methods, required materials and facilitators. The facilitators will provide support to organize training of farmers with this agri entrepreneurship module. After training, farmers should be able to achieve success in running their farms, as profitable businesses. For this drive to greater commercialization, farmers may need further support and advice from extension agents. So, the extension workers might conduct the training for farmers regularly with market analysis, developing farm plans etc. including disseminate demand-driven advisory

services to the new set of clients and thus the client will be shifting over as an agri-entrepreneur.

Conclusion

Through this study, it may be possible to further prepare the agri-entrepreneurship development training module in order to bring more responsive and sustainable results to the farmers in Bangladesh. There is a high potential of some farmers who have entrepreneurial spirit in rural areas, however, they are facing challenges to gain formal entrepreneurial training and support. Extensionists as well as NGO professional have also been facing limitations to identify better curriculum for that agri-entrepreneurial training, but the screening out of contents and curriculum on agri-entrepreneurship development training might inspire the extensionists to develop further modules with their field-based knowledge and skills which will be more practical for rural farmers. This module will increase the skills on agri-entrepreneurship and thus they will be able to know the ways of identifying and selecting new agri-business ideas, start properly as well as can manage successfully with profitability, which can accelerate the reducing poverty. Investing in agri-entrepreneurship can open a new horizon of agricultural development. The Government of Bangladesh should invest in generating state of the art knowledge on agri-entrepreneurship, considering current and imminent challenges such as climate change, which is currently unavailable. The Ministry of Agriculture and the DAE should seize the opportunities of enhancing agri-entrepreneurship through developing innovative finance and creating conducive environments.

Conflicts of Interest

The authors declare no conflicts of interest regarding publication of this paper.

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