

# Impact of Farmer Field Schools on Farmer's Development under Agriculture and Food Security Project-II in Khagrachari Hill District, Bangladesh

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**Abstract-** Farmer Field Schools (FFS) consist of groups of people with a common interest, who get together on a regular basis to study the “how and why” of a particular topic. The topics covered can vary considerably – from IPM, organic agriculture, animal husbandry, and soil husbandry, to income-generating activities such as handicrafts. The FFS, however, are particularly adapted to field study, where specific hands-on management skills and conceptual understanding is required (Gallagher, 2003). In order to know the farmer's development study conducted in selected/representative para (villages) of all Upazilas of Khagrachari Hill District where the Agriculture and Food Security project has been implementing since 2009-'10. The study covered 100 paras, 36 Unions, and 8 Upazilas of Khagrachari where para are selected thoroughly by statistical drawing sample. In this study researcher tries to highlight the agriculture and food security project for the development of the people (Farmer's) of hill tracts of Bangladesh. Researcher also tries to disclose the activities of the agricultural extension in Khagrachari Hill District.

**Keyword:** *Farmer Field Schools (FFS), The Integrated Pest Management-Farmer Field School (IPM-FFS), seed to seed or egg to egg.*

## I. INTRODUCTION

Agriculture and Food Security Project funded by Danish International Development Agency (DANIDA) has been implementing since 2010 in Chittagong Hill Tracts as Phase-I or pilot project to 2013. The project has jointly been implementing by CHTDF-UNDP and three Hill District Councils and main program of the project is focused on the formation and implementation of Farmer Field Schools (FFS). In the pilot phase-I, 2015 FFS was formed and successfully implemented its activities in Khagrachari Hill District. After farmers' acceptance and stakeholders' cooperation the project is extended as phase-II (AFSP-II) for five years duration from July-2013 to June-2018. The basic difference of AFSP-I from AFSP-II is nothing but its implementation strategy. In past, as of AFSP-I, one Farmer Facilitator (FF) used to operate one FFS only and employed for duration of 1.5 year (one year for technical session and six month for follow-up task), but now in AFSP-II, one Farmer Facilitator has been employed for duration of 3.5 year to operate by turns at least 3-5 FFS usually called as FFS cluster considering one year for own village area, second year for two new FFS formation with own FFS to follow-up and accordingly third year for two new FFS formation with two old FFS to follow-up. The strategy in implementation of FFS has been changed due to load of training of Farmer Facilitator (FF-ToT) to be minimized. In the said AFSP-II project, Total 1800 FFS will be implemented in whole Chittagong Hill Tracts covering 26 Upazilas of Khagrachari, Rangamati and Bandarban Hill District, of which 565 FFS by turns will be implemented solely in Khagrachari

Hill District in AFSP-II. Each and every FFS is implementing through Integrated Farm Management (IFM) approach where there is a combine view of livestock, agriculture, fisheries, nutrition and also business and marketing knowledge remaining (**Source:** Office records-AFSP-II, KHDC, Khagrachari). The overall objective of AFSP-II project is to alleviate poverty in back behind community people and overall development and create sustainable employment in Chittagong Hill Tracts. Besides these objectives, it is to contribute in acceleration of historical Peace Accord- 1997. There are basically two specific objectives of AFSP-II project in CHT. The first objective is to promote farm agricultural production (agriculture/livestock/fisheries) and diversity in production in marginal and hardcore poor people of CHT through Integrated Farm Management approach. The second one is to accelerate the de-centralized activity of already Khagrachari Hill District Council handed-over departments (Agriculture /Livestock /Fisheries) (**Source:** CHTDF-UNDP and KHDC, 2014).

## II. LITERATURE REVIEW

### A. History of Farmer Field School (FFS)

The term “Farmers' Field School” comes from the Indonesian Sekolah Lapangan meaning simply “field school”. The first Field Schools were established in 1989 in Central Java during the pilot phase of the FAO-assisted National IPM Programme. Farmer field school (FFS) was first promoted by the Food and Agriculture Organization (FAO) in Indonesia in a small scale rice-based system in 1989–1990 and then quickly expanded to other Asian and African countries (Cai et. al., 2016). This Programme was prompted by the devastating insecticide-induced outbreaks of brown plant hoppers (*Nilaparvata lugens*) that are estimated to have in 1986 destroyed 20,000 hectares of rice in Java alone. The Government of Indonesia's response was to launch an emergency training project aimed at providing 120,000 farmers with field training in IPM, focused mainly on recording on reducing the application of the pesticides that were destroying the natural insect predators of the brown plant hopper (Khisra, 2004 and Bijlmakers, 2011). At the end of the eighties of the last century farmers in Indonesia were putting their crops, their health and their environment at severe risk through massive abuse of highly toxic pesticides promoted aggressively by the private industry and government. Pest species were becoming resistant and in some cases resurgent. What was called for was a large-scale decentralized programme of education for farmers wherein they become “experts” in managing the ecology of their fields-bringing better yields, fewer problems, increased profits and less risk to their health and environment (Dilts, 2001). The Integrated Pest Management-Farmer Field School (IPM-FFS) and a corresponding large-scale Indonesian programme were developed. The genesis of IPM was a response to the emergence of problems associated with the reliance on

chemical controls for insect pests by governments, extension systems and farmers. The search for solutions to these problems led to the development of a more holistic view of what constituted an agro-ecosystem and how human interventions could either enhance or disrupt one. FFS alumni are able to not only apply IPM principles in their fields, but also to master a process enabling them to help others learn and apply IPM principles, and organize collaborative activities in their communities to institutionalize IPM principles. A good farmer field school process ensures these outcomes. The educational concepts underpinning the FFS approach are drawn from adult non-formal education. These concepts have been found to be relevant across the many countries and cultures in which the FFS approach has been used, and have proven to be empowering for farmers. One of the biggest problems with many of the developments in IPM over the years has been the tendency to generalize and make recommendations for farmers across large and highly heterogeneous areas. This has been true for all types of input recommendations including fertilizers, pesticides and rice varieties. This problem, ecological heterogeneity, has also severely limited the effectiveness of government monitoring and forecasting systems. This local specificity requires the farmers become IPM experts. The main crop protection approaches since the late 1960s, from the perspective of donor support (Braun and Duveskog, 2008). Governments across Asia have enacted policy in support of one or more of the four approaches of FFS. Some countries have supported each of the approaches over the last four decades, often using more than one approach at the same time. Countries have often adopted new approaches without abandoning old ones, despite glaring contradictions. Each successive approach requires more data for decision-making and the decisions made cover increasingly smaller units of area and time. This increased precision in decision-making, not surprisingly, has led to better control of insect pests and reduced use of pesticides. The FFS approach was designed to address the problem of ecological heterogeneity and local specificity by placing the control of small-scale agro-ecosystems in the hands of the people who manage them (Pontius, et. al., 2002). The first wave of FFS was conducted in 1989 in the rice fields of Indonesia. This involved 200 FFS in four districts of Yogyakarta initiated by the Indonesian National IPM programme with funds from the Government of Indonesia- United States Agency for International Development (GoI-USAID) and technical assistance from Food and Agriculture Organization of United Nations (FAO). By 1990, the Indonesian National IPM programme scaled up and launched 1,800 FFS for rice IPM in six provinces in Java, Sumatra and South Sulawesi. Around 1991, the pilot FFS in IPM for rotation crops (mainly soybeans) was initiated while the FFS programme spread out to different countries in Asia (CIP-UPWARD, 2003). In Bangladesh, the FFS was first used in the early 1990's in FAO implemented Integrated Pest Management (IPM) program. Initially, FFSs organized by Department of Agricultural Extension (DAE) followed the "original" rice IPM FFS curriculum to a large extent, with a strong focus on managing pest problems and with the aim of reducing pesticide related problems (Roy et. al., 2013).

### **B. Current global status of Farmer Field Schools**

Braun, et. al. (2005) stated an overview of the global status of FFS is difficult to obtain since many different organizations have implemented FFS in over 87 different countries. He carried out a Farmer Field School global survey in 2005- this study was used as a reference to judge the current global status

with some additional information and details for the period 2005-2008. Based on the global survey of 2005 a rough estimation is that by 2008 10-20 million farmers have graduated from Farmer Field schools globally. FFS are active in Asia (including East, South-east, South, Central and Middle East), Africa (Western, Southern, Eastern and Central), Latin America (South and Central America), the Caribbean, Eastern Europe and recently in Western Europe (Denmark) and the USA. The geographic spread has been accompanied by local cultural and socio-economic adaptations by local facilitators. In the case of moving from Asia to Africa, the focus moved from IPM to Integrated Production and Pest Management (IPPM) due to an emphasis on production and already low levels of pesticide use in most crops since structural adjustments took place. In Asia, the first IPM farmer field school was conducted in Indonesia in 1990. Since then, over two million rice farmers have participated in rice IPM farmer field schools. During the last decade, farmers, agriculture extension agents, development workers, agronomists, governments and NGOs conducted over 75,000 farmer field schools throughout Asia and have been learning how to facilitate the FFS approach (Din and Morisson, 2003). In recent years, a number of development agencies have promoted farmer field schools (FFS) as a potentially more effective approach to extend knowledge to farmers. FFS programs were first introduced in East Asia, in the late eighties, as a way of diffusing knowledge-intensive integrated pest management (IPM) practices for rice. 3 FFS have since been adapted to work with other crops and diseases, and have spread rapidly across Asia, Africa, and Latin America (Nelson et al., 2001). After Asia the FFS approach has been extended to several countries in Africa and Latin American. African countries implementing the approach are among others Kenya, Uganda, Tanzania, Zimbabwe, Zambia, Malawi, Ethiopia, Ghana, Nigeria, Gambia, Egypt, Lesotho, Swaziland and Mozambique (Khisa, G., 2004). The FAO-supported FFS programs were launched nationwide in China in the 1990s, but were largely discontinued in 2007 due to FAO's cutoff of funding support. By 2010, 758 FFSs were set up in Beijing, one in each participating village. They include 20% of all the agricultural villages in the Beijing area. Approximately 40,000 farmers participate in the FFSs' activities (Cai et. al., 2016).

### **Essential Elements of Farmer Field School**

#### ***The Farmer group***

The group comprises of individuals (20-25 in no.) who have a common interest, forming the core of a Farmer Field School (Apina, 2010). In a typical FFS a group of 20-25 farmers meets once a week in a local field setting and under the guidance of a trained facilitator (FAO, 2016). A group of people with a common interest form the core of the FFS. The group may be mixed with men and women together, or separated, depending on culture and topic. The group could be an established one, such as a self-help, women's, or youth group. The FFS tends to strengthen existing groups or may lead to the formation of new groups (Gallagher, 2003; Braun and Duveskog, 2008).

#### ***The field***

FFSs are about practical, hands-on topics. In the FFS, the field is the teacher, and it provides most of the training materials like plants, pests, soil particles and real problems (Apina, 2010, Braun and Duveskog, 2008). Farmers are usually much more comfortable in field situations than in classrooms. In most cases, communities can provide a study site with a

shaded area for follow-up discussions (Braun and Duveskog, 2008).

### **The Facilitator**

The facilitator is a technically competent person who leads group members through the hands-on exercises. The facilitator can be an extension agent or a Farmer Field School graduate. (Apina, 2010). All facilitators need training. Extension facilitators need season-long training to (re)learn facilitation skills, learn to grow crops with their own hands, and develop management skills such as fund-raising and development of local programmes. Farmer Field School graduates are usually given special farmer facilitator training (10-14 days) to improve technical, facilitation and organizational skills (Braun and Duveskog, 2008). An FFS facilitator is charged with the day-to-day responsibility of facilitating FFS groups and must have undergone a training of facilitators (ToF) course organized and facilitated by competent MTs. FFS facilitators are trained through a formal FFS training of facilitator (ToF) course developed and run by experienced FFS master trainers (FAO, 2016). FFS facilitators come from a wide variety of domains. They typically include extension workers, NGO workers, farmer organization staff or previously trained farmers. Their role is to encourage active exploration and understanding of how farming systems work. They introduce new ideas through guided exercises and stimulate discussion “by farmers, for farmers”, without dominating the scene. Facilitators go through rigorous, season-long training conducted by “master trainers” and follow the same “learning-by-doing” approach as the farmers they will eventually train in FFS. The facilitators and master trainers ensure linkages with district and national-level resources, helping to improve flows of information and knowledge sharing (FAO, 2016).

The common selection criteria for facilitators

According to FAO (2016), the common selection criteria for facilitators as follows:

- have agricultural training of some kind, formal or informal, or have some level of advanced skills, knowledge and experience in agriculture/livestock/fisheries;
- be technically competent for the agroecosystem at hand;
- be available to facilitate the FFS process;
- be able to share experiences and connect well with other community members;
- have good people skills and an aptitude for informal and participatory ways of working;
- have at least some reading and writing skills;
- speak the local language;
- live in the local community;
- have a dynamic and confident personality.

Roles and Duties of Farmer Facilitator as follow (Khisa, 2004)

- Technical backstopping
- Guide in decision making
- Team leader
- Links with external facilitator and collaborators
- Helps the group in achieving their objectives
- Helps in conflict management
- Initiates new FFS
- Explains the objectives and FFS process
- Should help with observations and analysis
- Should start from simple to complex endeavours

- Keeps discussion lively
- Probe to help participants arrive at appropriate conclusions
- Help to smoothen out domineering cases
- Helps participants to reach an appropriate consensus
- Time management
- Show respect to all participants and their opinions
- Helps participants identify opportunities and potentials in their environment

How can facilitators improve their relationship with participants (farmers) as stated by Khisa, 2004

- Get to know each other (Establish rapport)
- Use of right language (brief and clear)
- Create a conducive environment
- Encourage full participation
- Understand and respect their cultural norms
- Display/depict good morals
- Make your mission clear
- Avoid gender bias
- Adhere to your promises and programme
- Be flexible
- Be transparent and accountable
- Accept genuine criticism
- Be timely
- Commitment to the group and the team
- Team up with them
- Being a role model
- Know farmers priorities
- Deliver quality service
- Encourage dialogue
- Keep abreast with new technologies
- Be professional and rational.

### **The curriculum**

The FFS curriculum follows the natural cycle of its subject, be it crop, animal, soil, or handicrafts. For example, the cycle may be “seed to seed” or “egg to egg”. This approach allows all aspects of the subject to be covered, in parallel with what is happening in the FFS member’s field (Apina, 2010; Braun and Duveskog, 2008). Other activities in the curriculum include 30-120 minutes for specific topics. Icebreakers, 480organized480, and team/480organized480on building exercises are also included in each session. The curriculum of many FFSs is combined with other topics. In Kenya, for example, the FFSs follow a one-year cycle including cash crops, food crops, chickens or goats and special topics on nutrition, HIV/AIDS, water sanitation and marketing (Braun and Duveskog, 2008). In Khagrachri, FFS curriculum consists of 15 modules and cover more or less on 70 sessions/topics (Annex:1) and curriculum is selected through a process of demand/need assessment of target community (CHTDF-UNDP and KHDC, 2014).

### **The programme leader**

It is essential to have a good programme leader who can support the training of facilitators, get materials organized for the field, solve problems in participatory ways and nurture field staff facilitators. This person needs to keep a close watch on the FFSs for potential technical or human relations problems. They are also the person likely to be responsible for monitoring and evaluation. The programme leader must be a good leader and an empowering person. He or she is the key to successful programme development and needs support and

training to develop the necessary skills (Braun and Duveskog, 2008).

### Financing

FFSs need such sort of financing to support the group learning activities. They can be expensive or low-cost, depending on who implements them and how they are conducted (Apina, 2010, Braun and Duveskog, 2008). Due to high allowances, transportation costs and several layers of supervision programmes, they can end up being expensive. Obviously, the greater the distance that facilitators need to travel to get to the field, the higher the cost of transport. When the FFS is carried out by local organizations and farmer facilitators, initial startup costs may be moderate, but the running costs will be much lower (Braun and Duveskog, 2008). In AFSP-II project, the FFS input grants budgeted BDT. 24,000/- for procuring and purchasing training materials only.

### How does FFS benefit farmers?

Hagiwara, et. al. (2011) stated following points:

1. Strengthening observation capability and increasing knowledge ownership through discovery based learning.
2. Building self-confidence and enhancing decision-making capacity.
3. Minimizing risks in experimenting with new practices.
4. Changing deep-rooted beliefs and practices.
5. Developing problem-solving capabilities.

### Conditions of successful FFS

Khisa, G. (2004) stated the following conditions of successful FFS:

- Well trained facilitators.
- Well defined priority problem.
- Organized community that is dedicated/committed and willing.
- Clear understanding of the concept and procedure by all stakeholders.
- Support and goodwill of the authorities at various levels.
- Availability of appropriate technology.
- Adequate resources and logical support.
- Proper identification of site/area.
- Proper identification and selection of participants.
- Flexible and dynamic farmer group that is well Organized and structured.
- Farmers with common interest.
- Proper and quaranteed supervision, monitoring and evaluation of the activities.

### Objectives of the study

The overall objective of the study is to find the impact of Farmer Field Schools on Farmer's Development. The Master Trainer-Training of Trainers (MT-ToT) and Farmers Facilitator- Training Program (FF-ToT) because training part of any project is also a vital driving force to make the project successfully implemented. FF-ToT programme directly or indirectly impact on the FFS session quality conducted by FF and further overall implementation and replication of the project.

### Methodology of the Study

In order to collect the qualitative information regarding the consequence of farmer's development by FF-ToT training

programme, the case study method was very useful one. There are two case studies (detailed in chapter-III) to collect such information and it was collected directly from primary sources (FF) where there was included the respondents' quotation regarding the consequence of FF-ToT.

Table 01: Measurable areas and indicators used under the case study

Measurable areas (Before and after ToT training)	Indicators to be measured	Means of verification/S source of data information
1. Family status of respondents	Family members, Financial condition, Farming activities (Agriculture/livestock/f isheries), crop land ownership & crop production etc.	Face to face interview/primary source.
2. Social status of farmers	Farmers' leadership in village, acceptance of farmers, women empowerment status, involvement of social work etc.	Face to face interview/primary source.
3. Confidence building	Speech in front of people, session conduction, technical knowledge, method of agricultural production (conventional/modern).	Face to face interview/primary source.
4. Capacity building	Motivation power, Diplomacy, application rate of technology in community level, acceptance of community, reputation status, rate of asking level of community regarding FFS	Face to face interview/primary source.
5. Communication skill	Coordination with GoB department/FFS coordinator/MT/CLW & CPW/various stakeholders.	Face to face interview/primary source.
6. Conflict regulation in FFS	Interpersonal/Intra-personal conflict regulation, peacemaking strategy.	Face to face interview/primary source.
7. Organizing skill	Formation of FFS, arranging meeting/session, face in visitors/monitors, vaccination program.	Face to face interview/primary source.
8. Budget management	Organize visit/meeting/session, vaccination & deworming program, Bill adjustment.	Face to face interview/primary source.

9. Agricultural technology followed	Method of agricultural production (conventional/modern), success rate of technology applied, study plot results, community acceptance	Face to face interview/primary source.
10. Carry out FF's rules and responsibilities	Regular session conduction, attend monthly meeting, reporting duely etc.	Face to face interview/primary source.
11. National/International programme	Observe FFD/environment day/agriculture fair.	Face to face interview/primary source.

approach where there is a combine view of livestock, agriculture, fisheries, nutrition and also business and marketing knowledge remaining (Source: Office records-AFSP-II, KHDC, Khagrachari).

**Multi-level stakeholders' involvement at different level**

In promoting economic development and community empowerment projects in CHT, the project includes various stakeholders at various levels of implementation and coordination.

Table 03: Stakeholders Involvement at different level

Sl	Level	Stakeholders Involved in Program Implementation and Coordination
1	Para	Traditional leadership (Circles, Headman, Karbari), target community members, Women, PDC members, UP Ward member, Local NGO, I-NGO, Community Social worker, CLW/CPW, CBOs, Youth group, School teacher, local elite, Civil society etc.
2	Union	UP Chairman, UP Members, Traditional leadership (Headmen, Karbari), GoB department, Local NGO, I-NGO, CLW/CPW, Local Traders, School Teachers, Women's Associations, CBOs etc.
3	Upazila	Upazila Nirbahi Officer, GoB Department Staffs at Upazila level, Headmen's Associations, Upzilla Parishad, Local NGO, I-NGOs, Local elite, Local Traders, School Teachers, Civil society etc.
4	District	HDC, Circle Chiefs or representatives, Deputy Commissioner or representatives, HDC Technical staffs, RC, I-NGO, Hill Tracts NGO Forum, Concerned Line Departments, Private sector, Women leaders, Civil society etc.
5	Regional	Regional Council, Hill District Council, Deputy Commissioner or representatives, Circle Chiefs or representatives, I-NGO, Private Sector, Hill Tracts NGO Forum, Women leaders, Civil society, Chittagong Hill tracts Development Board, Ministry of Chittagong Hill Tracts Affairs etc.
5	Divisional/National	Ministry of CHT Affairs, Economic Relations Division(ERD), Ministry of Finance, Hill Tracts NGO Forum, NGO Bureau, Other relevant Ministries/line agencies etc.

Source: Community Empowerment Guidelines- Prepared by Community Empowerment Consultant Team, CHTDF/UNDP, March 03, 2004.

**Organogram of supervising and implementing organization**

**Agriculture and Food Security Project-II in Khagrachari Hill District**

Agriculture and Food Security Project funded by Danish International Development Agency (DANIDA) has been implementing since 2010 in Chittagong Hill Tracts as Phase-I or pilot project to 2013. The project has jointly been implementing by CHTDF-UNDP and three Hill District Councils and main program of the project is focused on the formation and implementation of Farmer Field Schools (FFS). In the pilot phase-I, 215 FFS was formed and successfully implemented its activities in Khagrachari Hill District. After farmers' acceptance and stakeholders' cooperation the project is extended as phase-II (AFSP-II) for five years duration from July-2013 to June-2018. The basic difference of AFSP-I from AFSP-II is nothing but its implementation strategy. In past, as of AFSP-I, one Farmer Facilitator (FF) used to operate one FFS only and employed for duration of 1.5 year (one year for technical session and six month for follow-up task), but now in AFSP-II, one Farmer Facilitator has been employed for duration of 3.5 year to operate by turns at least 3-5 FFS usually called as FFS cluster considering one year for own village area, second year for two new FFS formation with own FFS to follow-up and accordingly third year for two new FFS formation with two old FFS to follow-up. The strategy in implementation of FFS has been changed due to load of training of Farmer Facilitator (FF-ToT) to be minimized.

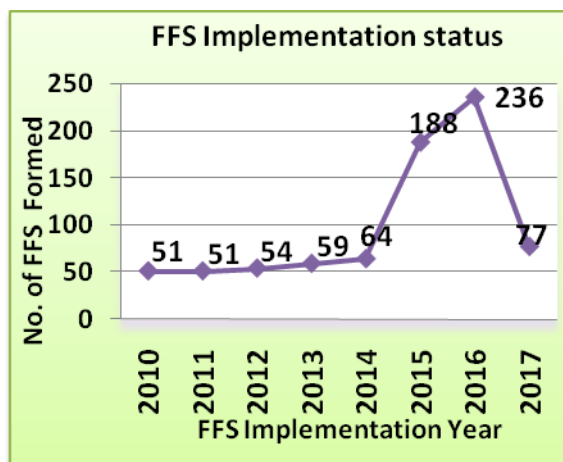
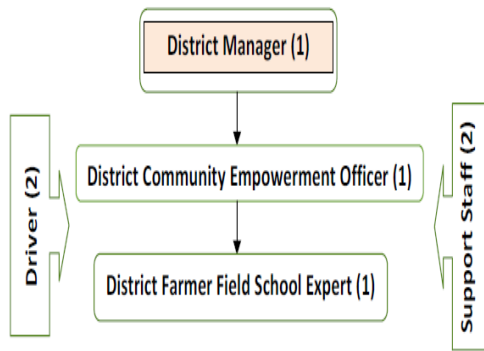


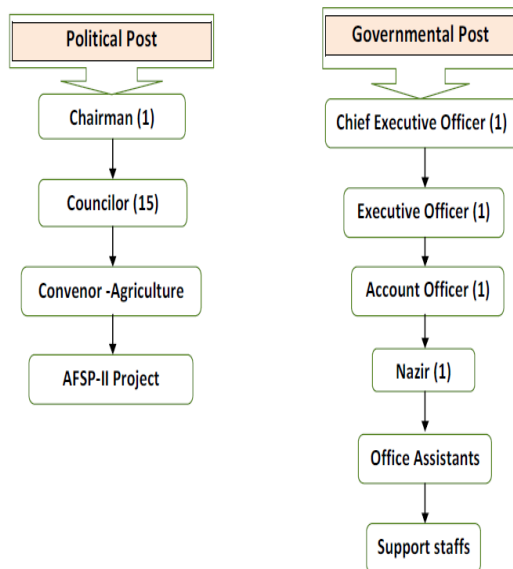
Chart 02: FFS Implementation Year

In the said AFSP-II project, Total 1800 FFS will be implemented in whole Chittagong Hill Tracts covering 26 Upazilas of Khagrachari, Rangamati and Bandarban Hill District, of which 565 FFS by turns will be implemented solely in Khagrachari Hill District in AFSP-II. Each and every FFS is implementing through Integrated Farm Management (IFM)

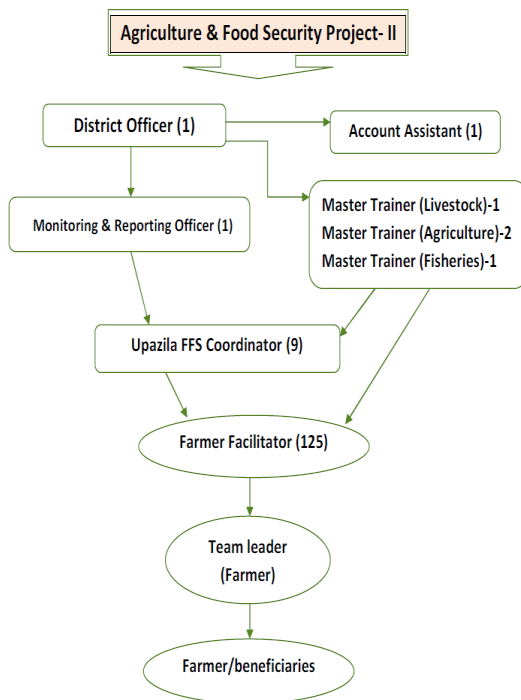
Flow chart 1: UNDP-CHTDF Organogram



Flow chart 2: Hill District Council Organogram



Flow chart 3: AFSP-II Project Organogram



**Overall objectives of AFSP-II in CHT**

The overall objective of AFSP-II project is to alleviate poverty in back behind community people and overall development and create sustainable employment in Chittagong Hill Tracts. Besides these objectives, it is to contribute in acceleration of

historical Peace Accord- 1997 (Source: CHTDF-UNDP and KHDC, 2014).

**Specific objectives of AFSP-II in CHT**

There are basically two specific objectives of AFSP-II project in CHT. The first objective is to promote farm agricultural production (agriculture/livestock/fisheries) and diversity in production in marginal and hardcore poor people of CHT through Integrated Farm Management approach. The second one is to accelerate the de-centralized activity of already Khagrachari Hill District Council handed-over departments (Agriculture/Livestock/Fisheries) (Source: CHTDF-UNDP and KHDC, 2014).

**Expected outcomes/results of AFSP-II in CHT**

Agriculture and Food Security Project-II was designed by donor agency having three main expected outcomes/results (Source: CHTDF-UNDP and KHDC, 2014):

- i) It is to increase 25% of agricultural production (agri/livestock/fisheries) in project included poor farmers of CHT.
- ii) Promotion of food security status of CHT through alleviation of food crisis and accordingly meet up nutritional demand.
- iii) Confidence building of poor farmers.

**Core issues to be analyzed under the study**

By close collaboration of CHTDF-UNDP and All Hill District Council, Agriculture and Food Security Project (AFSP) has been implementing in Chittagong Hill Tracts. The project is continuing mainly depending upon motivation of grass-root level farmers to replicate Farmer Field School Knowledge by some Upazila wise recruited Farmer Facilitators (FF) whom again followed and monitored by Upazila FFS coordinator (UFFSC) at Upazila level and all FFs are gaining backstopping support by technically sound Master Trainer (MT). In beginning of the project, project area where to implement project was selected by respective union parisad (UP) and an overall orientation on project was given to para community people, simultaneously para development plan (PDP) also carried out through Focus Group Discussion (FGD) by the project team. Then Farmer Facilitator (FF) was employed to carry out grass root level training on homestead agricultural production (agri/livestock/fisheries) and basic nutritional concept also. Small amount fund budgeted BDT. 24,000/= (Annex-3) is given to each Farmer Field School only for costing in training material and training necessities. The FFs were trained up (FF-ToT) by Master trainers on various agricultural issues (Annex-1). (agri/livestock/fisheries) for duration of total 60 days splitting into 6 spells. Each spell is consisting of 10 days. On the other hand, MTs were also trained up (MT-ToT) by expert Master Facilitator (MF) from IFMC component of Department of agriculture extension (DAE) for 40 days splitting into 4 spells. Now core issues on MT-ToT and FF-ToT training to be analyzed and evaluated under this study and recommend possible necessary steps to be taken if any.

**Case study:**

**“Developing leadership, Women empowerment and Winning member position of Union Parisad: a success story of Mrs. Manik puti Chakma as a consequence of FF-ToT programme”**

**Mrs. Manik puti Chakma**, a proud Farmer Facilitator of **Vill: Ratnasen Karbari Para; Union: Chengi; Upazila: Panchari;**

**District:** Khagrachari under Agriculture & Food Security Project-II of Khagrachari Hill District Council. She used to spend a very simple peasant life with her husband having two children in her family. She was quite familiar with a conventional and obsolete agricultural production system before joining in Agriculture & Food Security Project as FF i.e no modern and improved technology was followed by her family. As a result, in most cases, she has to face experience of losing from agricultural production (vegetable/rice production/fruit gardening), livestock production and cross-dam fish production. It is, so to speak, financial condition of her family was not so good at all. Moreover, her leadership in family as well as in whole village was very minor before obtaining of FF-ToT programme under AFSP-II. But now, the scenario of said situation is quite opposite in comparison to current one. In fact, the previous situation was started to change after being a good farmer facilitator under Agriculture & Food Security project.



Fig-01 Manikputi chakma conducting session

She was employed as FF in June'2014 on that terms and condition she would have to conduct a session on various agricultural contexts (agriculture/livestock/fisheries) to the poor farmers of farmer field school in every week. Although she was developed to a technically sound FF through a Season Long Learning (SLL) residential training of total 60 days facilitated by expert Master trainer of KHDC owned on various agricultural/livestock/fisheries/nutrition/business issues (stated in Annex:1), she was quite in hesitation that whether she could able to conduct FFS session or not particularly in the very beginning of ToT programme. Besides the technical contexts of ToT, it undergoes some skill development activities like ice-breaking/group dynamics/group work and presentation/session planning & session practices in front of trainees/carry out HTL/team leader responsibilities/management of people of different motive in a group etc.



Fig-02: Responsibility Hand over ceremony

After successful completion of all context of both technical and skill development issues, she returned to own village and started FFS session conduction. Side by side, she used to

implement ToT learnings and knowledge in her own crop field, livestock production, cross-dam fish culture etc. and proved the importance of modern technology in agricultural /livestock/fish production. In this way, her farming activities also extended and thus gradually improved her financial condition as well. In course of time, she gathered popularity and acceptance of farmers because farmers were getting benefit in crop field from the practice of her given FFS learnings & instruction. Then both leadership skill and confidence was built up in him.

She proved her leadership development and women empowerment in last UP election held in April-2016 by winning member position of Chengi UP. She certainly admits of it in a word and says, *‘mainly FF-ToT training facilitated by our Master trainer is the driving force of my changing life. The learnings and skills that I have gained from FF-ToT training are quite immeasurable and incredible. In this regards, my eagerness and sincerity towards learnings and instruction help me to reach such situation and I want to retain my FFS activities as well as public services so far I can’*. But still she upholds her FF responsibilities side by side the UP member’s role. So to speak, now-a-days, her reputation for both FF and UP member is quite praise worthy.

**“A story of Mr. Mongshila marma: From simple farmer to farmer facilitator and eventually union parisdad member as a consequence of FF-ToT programme”**

The village Chongrachari Marma para is situated about 17 KM away south-east corner of Khagrachari town. The village is mainly rural agricultural village. **Mr. Mongshila marma**, a simple farmer lives



Fig-03: Mongshila marma driving motorcycle

in this village. He spends a very simple life before involvement in the Agriculture and food security project. His main earning source was various agricultural activities and quite adapted in conventional agricultural system. agricultural system.



Fig-04: Mongshila marma conducting session

Besides the agriculture, sometimes he has to drive motorbike and earn some supporting money to meet up his children school expenses. His acceptance to villagers as well as leadership was not so prominent at that time. So to speak, in a word, he had to drive his family in very poor life before joining this project. But, when he was employed as Farmer facilitator (FF) in June' 2014 by Khagrachari Hill District Council under Agriculture and food security project, then his life started to change. As he received ToT training on various agricultural activities (agriculture /livestock /fisheries /nutrition/agri-business and the likes) facilitated by Master Trainer, he began to exercise the training knowledge on his own crop fields and got benefit from various agricultural crops. Not only agricultural context, he was trained up also on various skill development activities like GD, ice-breaking, leadership development, management of people of different motive & ideology etc. He also applied this knowledge and skill on his farmer field school formation and implementation. He was a dedicated farmer facilitator for the project. He gathered practical skill from farmer field school e.g organize meeting, conduct training, speech delivery, coordination with GoB departments & various stakeholders etc. In the course of time, as he taught the farmers regularly about agricultural methodology and farmers got benefit from it; he started to gain popularity and acceptance of the rural people.



Fig-05: Mongshila maram as a UP member

For his name and fame as a Farmer facilitator, people nominated him in last union parishad election-2016 as UP member in Mahalchari sadar UP and eventually he won the position of UP member. After winning the UP member position, he acknowledged the agriculture and food security project very much and said, "I could not be a UP member, if I was not employed as Farmer Facilitator and further trained up in FF-ToT training facilitated by Master Trainer. Definitely Farmer facilitator position is my turning point of my life and FF-ToT training played here a vital role of gathering my name and fame from the village people and consequently as UP member. In future I will try my best to uphold my popularity to villagers and confer public services to them" Now he is more or less solvent and carrying out FF responsibilities as well as UP member's role and his social status and acceptance is also increased to a greater extent in comparison to earlier one. He is, after all, a successful person starting from a simple farmer to farmer facilitator and finally a proud UP member.

### CONCLUSION

The results emerged from the conducted study clearly concluded that both MT-ToT as well as FF-ToT was effective and efficient which was revealed from farmer's development and analysis of respective participants's voice. The ToT program under Agriculture and Food Security project-II concertedly implemented by Khagrachari Hill District Council

and CHTDF-UNDP, from the participants' perspective, can be said that it was running in right path and hopefully the MTs will reflect their gained knowledge & skill in their field monitoring and backstopping support to farmer facilitators and FFs will also reflect their ToT skill in FFS implementation towards a better way. The study possesses an equal importance for both development actors (supervising organization & donor) and partner organization (Khagrachari Hill District Council) as it highlights about the level of evaluation of FF-ToT and MT-ToT programme.

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