

The Learning Space between Female Farmers and Female Extension Workers

A case study of Mir Bacha Kot District of Kabul Province, Afghanistan

A Research Project Submitted to

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Communication**

By

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DEDICATION

This thesis manuscript is dedicated to my family, relatives and friends for their love and affection.

Acronyms

ARTF	Afghanistan Reconstruction Trust
CSO	Central Statistics Organization
DAI	Development Alternative Incorporation
EW	Extension Worker
FD	Focus District
FOD	Farmer Organization Development
FPGs	Farmer Producer Groups
HLP	Horticulture and Livestock project
ICB	Institutional Capacity Building
IF Hope	International Foundation of Hope
IMST	Implementation Management Support Team
IPM	Integrated Pest Management
M&E	Monitoring and Evaluation
MAIL	Ministry of Agriculture Irrigation and livestock
MBK	Mir Bacha Kot
PGNs	Practical Gender Needs
SGNs	Strategic Gender Needs
PGs	Producer Groups
Showra	Traditional governing committee
TNA	Training Need Assessment
USAID	United State Agency for International Development
WB	World Bank

Abstract

Clearly, Afghanistan's future is synonymous with agriculture. The aim of this study was to contribute to the improvement of women's benefit in extension services of HLP by exploring the learning space of female farmers trained by female extension workers in MBK district of Kabul province. To achieve this, the research looked at the services HLP deliver to the female farmers according to its goals, female farmers' learning needs and the involvement of female farmers in agricultural extension training, and to the performance of female extension workers in the agricultural extension trainings.

The research was carried out in Kabul (Capital City) through conducting a case study in MBK district in Afghanistan. Data was collected through checklists with planned observation through qualitative method. The focus respondents were 6 female extension workers and 20 female farmers which were selected randomly from 9 geographically near to remote villages.

HLP relied on a general need assessment for all regions and all kinds of farming system without addressing gender issues and gender needs and interest of men and women. Farmers do not have much confidence in extension workers' competency and nor extension workers are regular, because of their long coverage. Extension workers of HLP lack skills and knowledge in extension methods, communication and presentation skills to work.

Another challenging issues were training methods because the farmers revealed that it was more theoretical, interest of farmers were for the delivery of the practical training. To make the trainings more effective and interesting extension workers should carry out practical training which is very useful for illiterate farmers to upgrade their knowledge and practical abilities.

Yet it was also found that in spite of these limitations, farmers appreciated getting together and learning in a group, and in that sense HLP has achieved that a learning space has been created between the women and between them and extension workers. The following points were suggested to improve the learning space between female farmer and female extension worker.

Since HLP conducted the trainings according to the seasonal calendar, a more systematic assessment is needed in their program formulation to keep extension programs relevant to the need of female farmers before any training program is planned and designed.

HLP is recommended to provide inputs to all group not only group leader; for the members encouragement to join the group or to motivate them.

It is at first recommended for HLP to build the capacity of the farmers first have to take into consideration to build the capacity of its extension workers by training extension staff on presentation skills, communication methods, problem and need identification to make sure they adequately address the concerns of farmers regarding communication skills, how to deal collectively with a group, how to facilitate farmers. Trainings could equip extension workers with new and relevant knowledge and skill about extension service delivery.

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1. INTRODUCTION

This study aims to explore the learning space between female farmers and female extension workers in Mir Bacha Kot district of Kabul province-Afghanistan. The study has presented in six chapters. The initial chapter presents the context of the research. Second chapter talks on the scientific literatures with respect to learning space and extension matters to link the research with an academic base. Third chapter presents the methodology of research. The results of the research have narrated in the fourth chapter; the fifth chapter is discussion on the results of the research with academic literature to make a scientific debate for analysis of situation. Finally the research has concluded and recommendations has provided to the relevant institutions for improvement of situation.

1.1. Background

Afghanistan is a landlocked mountainous country which is located in the central part of Asia having borders with China, Pakistan, Central Asian countries and Iran. The total area of Afghanistan is 652,090 Kilometre squares. The country is divided into 34 provinces, which are sub-divided into 398 districts. The population of the country is almost 30 millions. Agriculture is the main source of income and about 80% of Afghanistan's population depends on agriculture (FAO, 2007).

The last three decades of war in Afghanistan damaged all kinds of physical and social infrastructures. Living in a war-torn nation such as Afghanistan means that educational and economical opportunities are extremely limited for men and women, but Afghan women have been the main victims. During the Taliban regime women in Afghanistan experience one of the lowest social positions in the world even denied access to education. Female farmers in particular are still suffering from different social economical problems, which make their life difficult.

Between 1999 and 2002, Afghanistan experienced the worst drought, which greatly damaged production levels of agriculture goods. In 2002 the international community and the people of Afghanistan agreed and joined hands to make Afghanistan free of conflict and started efforts on rebuilding of this country. For the government of Afghanistan the rural community development which consist the majority of population is very crucial. Agriculture sector forms the back-bone of the country's economy and development of this sector contributes to decreasing of poverty at the community and national level (AISA, 2008).

The rest of the world knows Afghanistan for civil war, terrorism and opium cultivation but for the government and the common people the real big and important issues are development, peace and prosperity. For Afghanistan to overcome poverty, it needs to develop and boost its agriculture.

Agriculture in Afghanistan is largely a household activity that women, men and children are engaged in both horticulture and livestock sectors. Both women and men play vital roles in the agricultural sector in Afghanistan. Women in particular play an important role in food production and household food security also over burdened with household responsibilities, which they cannot delegate; women are often less educated than men and have a very limited access to agricultural resources such as land, credit, agricultural inputs and technology, extension training and services, to improve their agriculture production and productivity and make their living better. In spite of their productive and reproductive tasks they are frequently underestimated and overlooked because of gender bias and gender blindness (Word Bank, 2008).

Afghanistan is a male dominated society. Men have received the greater part of extension support, while women have benefited less and have been rarely encouraged to take part equally in extension activities. In most of the cases female farmers receive second hand information from their male family members, who participate in agriculture trainings. For example married women due to their shyness and low levels of education tend to ask questions and seek information from their husbands; it shows that these women use second hand extension messages through men.

Therefore, it is required for agriculture extension to work with women to bring them knowledge and skills to support them for improvement of their agricultural activities. In order to make women aware of social and institutional factors that creates barriers for them. The involvement in extension and adequately address their needs in plan of agriculture extension activities (HLP gender report, 2008). The extension workers and farmers have different personal experiences, diverse backgrounds and different motivational levels. Farmers capacity building can be achieve through advising farmers on both agriculture production and opportunities.

Providing comprehensive need-based service requires that the needs of the farmers are identified and clearly understood by service providers. It is important to keep in mind that farmer's particularly female farmers are usually having limited access to services and it is important that these farmers become visible to the service and actively demand the service they require. The need of individual members of the village and community should be identified and it should be defined in the broader context of total service delivery and multiple services needs (technical, financial and social). The ability of female farmers to accurately express their needs with confidence is a key indicator in measuring the success of the project.

Farmer organization offers great benefits to both farmers and service providers. However creation of farmer organisations FOs is the first step toward active participation of farmers in agriculture development to fully participate to the process and contribute to the improvement of their own situation which capacity development is require for the groups and also for individual farmers (DFID, 2009).

Considering these issues the Horticulture and Livestock project (HLP) in collaboration with Ministry of Agriculture, Irrigation and Livestock (MAIL) has established. The project aims to enrich female farmers' agricultural knowledge through its extension services.

1.2. Horticulture and Livestock Project (HLP)

Horticulture and Livestock project is one of largest projects of (MAIL) Ministry of Agriculture Irrigation and livestock. The project was established in 2006 for an initial period of 3 years and funded by the World Bank (WB) and Afghanistan Reconstruction Trust Fund (ARTF).

HLP aims at sustainable increase in production and productivity of perennial horticulture and livestock and producers' incomes for food security in focus areas in Afghanistan.

To achieve the objective, HLP has established horticulture and livestock producer groups and working with them to increase their production and productivity through three components (horticulture development, livestock development and institutional capacity development). The horticulture and livestock components have been organized around a specific set of overall expected project outcomes with a scope for developing national horticulture and livestock development modalities. The third component has been organized to support the two technical components with development of necessary human and institutional capacities for their effective implementation and institutionalization of the resultant development modalities.

HLP has also facilitated formation of producer groups under the Farmer Organization Development (FOD) component for the implementation of the projects through these groups. FOD has worked on an intensive process of group formation, mobilization and training for enabling the formation and strengthening of male and female producer groups in selected eleven target districts in central and northern region of Afghanistan. This (PGs) approach has shown results in terms of building social capital, increased capacity for self help and self management, and it has also resulted in increased awareness among members about HLP activities and operations, and it contributes to the HLP extension efforts.

HLP is in the process of developing a participatory extension and technology dissemination approach using the groups. This would involve farmer trainers from every producer group participate in the trainings (Devex, 2011).

In order to get a tangible result, in the last three years, HLP has organized 9,248 female horticulture & livestock target farmers into 361 female producer groups in 222 villages of 11 focus districts including MBK and have been directed its efforts at empowering female farmers in developing agriculture activities in Afghanistan (HLP monitoring report, 2010).

1.3. Problem statement

Women play very important roles in agriculture and rural development all over the world. In terms of the ratio of membership of women in agriculture extension, extension supports, participation in agriculture trainings, cooperatives and other activities which are low, but they have significant influence on them. However Women grow about half of the world's food, but own hardly any land, and they are overlooked by extension workers and have difficulty in obtaining credit. In Africa, three quarter of the agriculture activity is done by women while in Asia, Latin America and Middle-East, half of the agriculture labour is done by women. Women have often been excluded from agrarian reform and training programmes in new agricultural methods (Parkash, D, 2003).

HLP as a development and community based project has initiated agricultural extension activities, creating learning spaces where female farmers and female agricultural extension workers meet. In the current situation, this is organised as a conventional extension activity where the female extension worker is expected to transfer prescribed methods and technologies to the female famers.

The female farmer is most likely to be a mature adult, born and raised in a rural area, illiterate as a result of limited access to formal education, but equipped with indigenous knowledge and experience in farming activities. On the contrary, the female (EW) extension worker is most likely to be a young and junior professional, often with an urban background, educated but with little, if any, practical farming experience. The current communication process between these two actors seems to be influenced by big gaps.

The result is often that female farmers fail to understand and appreciate the new innovations they are trained by the extension workers. At the same time the farmers may expect other types of information or have other needs, which the extension worker cannot offer them and may not even be aware of their expectation and needs.

HLP gave an opportunity to the researcher to explore, how female farmers and extension workers communicate and meet with each other to construct a more meaningful process where learning can take place.

1.4. Research Objective and Questions

The aim of this study is to contribute to the improvement of women's benefit in extension services of HLP by exploring the learning space of female farmers trained by female extension workers in Mir Bacha Kot district of Kabul province. To achieve this, the research will search answers to the following question:

Why are the trainings for female farmers by female extension workers not able to support female farmers as expected?

To answer the main research question, the sub-research questions that need to be explored are:

- a. What kind of services HLP deliver to the female farmers according to its goals?

The first actor perspective to explore is the needs and involvement of female farmers:

- b. What are the female farmers' needs and interest to learn in Mir Bacha Kot district?
- c. How is the involvement of female farmers in agricultural extension trainings?

The second actor perspective to explore the performance of female extension workers:

- d. How is the performance of female extension workers in the agricultural extension trainings of female farmers?

2. LITERATURE REVIEW

It is impossible to forget one wing and then fly with the other wing. If someone is interested in learning something there must be a problem or need for that.

2.1. Agriculture Extension

Extension: The goal of extension is to help people to solve problems themselves. Although different ideas exist, the basic trust is that 'the common folk are to a degree 'living in dark', and that there is a need for well-educated people to shed some light' on their situation by means of educational activities. This reflects the early concepts of extension. In the new concept, extension slightly shifted from 'education' to supporting decision making or problem solving. Agriculture extension: assist and help farmers to identify and analyse their production problems and to become aware of the opportunities for improvement (Adam, 1982 cited in Leeuwis, 2004). According to Leeuwis 2004, definition of extension is as a practice that is experienced as 'help' and 'assistance' that leads to 'good decisions' and 'development'.

During the 1980s it was recognized that, extension could not just be regarded as 'help' and 'being in the interest of the recipient'. Extension is in many ways also an intervention that is undertaken or paid for by a party who wants to influence people in a particular manner, in line with certain policy objectives. Thus, it was realized that there was often tension between the interests of the extension organization and the recipients such as farmers. In this way, there is a need at least to link between the interest of farmers and extension organizations otherwise farmers would obviously not be willing to change.

Extension draws heavily on communication as a strategy for furthering aspirations. Communication is the process through which people exchange meanings. The language and signs used by an extension worker should be accepted and known by the society and their culture. As language is cultural created not natural and this suggests that certain words have different meanings in different cultures or societies (Branston, et al, 2010).

Communication marks a shift away from a focus on education to a focus on learning. What Communication Skills are used by Extension workers? Generally Extension will focus on the four following forms in its program design and delivery.

Technology Transfer: Involves a top-down approach where Extension workers deliver specific recommendations to farmers about the practices they should adopt.

Advisory Service: Where extension workers respond to farmers questions with technical prescriptions.

Human Resource Development: Training that used for farmers in top-down teaching methods, but where farmers are expected to make their own decisions about how to use the knowledge they acquire. For Example: The Extension worker is given 3 separate alternative approaches to pruning.

Empowerment Methods: Where knowledge is gained through farmers engaging in interactive processes with other farmers, with the expectation, they will make their own decisions (IF Hope, The process of extension).

Millar and Curtis (1997) states that, the roles of an extension worker includes letting farmers make their own choices about what they need, build on their own experiences and

knowledge, encourage both men and women to talk, express their views and ideas, give all members an opportunity in the group to have a say and to encourage a two way communication between farmers and extension workers.

On the other hand this broad view of extension very much focused on increasing production, improving yields, training farmers, and transferring technology. Nkonya et al., 2008 cited in Rivera pointed out that extension is to deal with marketing issues and partner with other service providers and agencies. Hence, extension becomes an organizational as well as an educational contributor to a country's knowledge economy.

People need to know more and want reliable information. Extension educators have an important role in keeping community updated on new skills, opportunities with technologies. As mostly farmers are adults, it is non-school based program that provides basic skills to individuals. It is personal oriented for all age groups, especially for adults for their immediate application to change and integrate contents with an open entry and any location. It is environmental base, flexibly structured, learner centred, part time, practical and so on. Package training, skill training, adult-learning, on-the-job-training and other agricultural related extension services are examples of non-formal trainings (Singh, 1999).

According to Leeuwis, (2004), extension workers should Support horizontal knowledge exchange, because Individual farmers usually have much expertise based on experience. Farmer-to-farmers (i.e. horizontal) exchange of knowledge is informal means of exchanging information. Typically, markets, work parties, funerals, celebrations, community meetings (showra's) provide opportunities for female farmers to talk about agriculture.

2.2. Female farmers in agriculture

"Human development can be characterized by double-edge sword with the "objective" material conditions on one side and the "subjective" personal needs on the other. Both aspects are relevant for the process and the content of learning" (Wals 2006, p: 54).

Interests and needs of the farmers are the fuels which guide the extension services into activities. The success or failure of training depends upon whether the training was need based and appropriate methodology applied or not. Satisfaction can only be possible when desire, needs and wants are fulfilled. The desires, needs and wants are related to provision of facilities which an individual feels as basic needs. It must be understood that in order to make extension programmes effective, the approach and procedure must be suited to the culture of the intended group of beneficiaries (trainer's guide, 1996).

It is important to stress that female farmers cannot be considered to be a homogeneous category, sharing exactly the same sort of problems and facing the same constraints. While it is possible to draw out some common principles which allow a broad definition of the condition of "female farmer", it needs to be recognized that there is considerable diversity also. Women, as with men, include young, old, disabled and able bodied, married and single, poor and relatively wealthy, from minority and majority groups, connected with influential power groups and the relatively powerless. For example, young unmarried female farmers may need to be considered and addressed by extension services differently to older or married women. An approach which treats all female farmers as the same can end up as inappropriate as those which assume that farmers as a whole are all the same.

Gender is defined as the socially given role, activities, responsibilities which are attributed to being either male or female and they determine how women and men should behave in society at a certain time (March, et.al, 1999). These are divided into practical gender needs (PGNs) and strategic gender needs (SGNs).

1. Practical gender needs: These are needs women identify in their socially accepted roles in society. They do not challenge the gender division of labour or subordinate position of women in society. Practical gender needs are a response to immediate perceived necessity and are concerned with inadequacies in living conditions (Moser, 1993). For example, inadequacies in living conditions like women say they need fuel or water because they are engaged in household chores but it does not challenge the gender division of labour.

2. Strategic gender needs: These are needs women identify because of their subordinate position in the society. They relate to gender division of labour, power, control, as well as traditionally defined norms and roles e.g., legal rights, domestic violence, equal wages and women's control over their bodies (Moser, 1993). The concept of position of women in the society describes the place of women related to that of men. These can be pursued by women mobilizing, organizing; getting involved in decision making, developing leadership and management skills (Bhasin, 2000).

Moser distinguishes between practical and strategic gender needs and develops a gender planning methodology called gender needs Assessment.

To effectively meet local needs and make the most of the opportunities for development, extension service should have understanding of their target audience. When planning activities aimed at local rural women, a range of information on their specific situation is needed, as well as on the inter-relationship between women's tasks and men's tasks. Some key areas which were mentioned in trainer's guide, 1996 require information separated by gender include:

- Specific tasks and responsibilities in agricultural production, household and non-farm activities (e.g. crafts, wage labour, trading).
- Location of these tasks (e.g. in the field, at what distance from the home, in the household, in the community, outside the community).
- Daily and seasonal work schedules of women and men.
- Responsibilities and financial obligations (e.g. provision of food, medicines, clothing, school fees) and their income or other sources of providing for these obligations (e.g. home gardens, barter).
- Access to resources for their agricultural and non agricultural work (e.g. credit, tools, and technologies) as well as control and decision-making power over the resources.
- Constraints, needs and priorities felt by women (e.g. lack of land title, access to credit, time, access to transport and inputs).
- Existing opportunities which could be developed or used further (e.g. existing self-help groups, good loan repayment rates).
- Extension service problems (e.g. wrong time/duration for meetings, information not relevant to farmers' needs).

Most of the time extension activities are planned without any of the above listed information. This inevitably leads to organization of activities which, at best, only partly meet local needs, and so limit the potential impact of extension works on local development. Although lack of consideration in production, storage, constraints and problems.

According to Moser 1993 gender roles are affected by age, class, race, ethnicity, religion and by the geographical, economic and political environment. The gender roles of women can be identified as reproductive, productive and community managing roles, while men's roles are categorized as either productive or community politics roles. Productive roles refer to the activities carried out by men and women in order to produce goods and services, either for sale, exchange, or to meet the subsistence needs of the family.

Reproductive roles are those needed the reproduction of the society's labour force. These tasks mostly done by women, like child bearing, rearing, and care for family members and so on. This role division and discrimination often puts women into the most disadvantageous position.

Despite the significance of women's role in agricultural development, evidence throughout developing countries shows that women's farming productivity and efficiency levels often remain very low. Among the key reasons for this is the lack of technical advice they receive on production and marketing, cultural practices, skills and technology. Extension services frequently fail to provide adequate information to female farmers through failing to recognize their specific needs. Poor access to agricultural extension services is one of the significant factors which affect the agricultural productivity of women farmers. Agricultural extension makes significant and positive impacts on farmers' knowledge and adoption of new technologies & hence increasing farm productivity and income (Birkhaeuser et al, 1991 cited in Hariharan 2005). Lack of equipment and appropriate technology, lack of access to credit, and their lack of familiarity with loan procedures may also limit their possibilities of obtaining, women's lower Levels of Education (illiteracy) relative to men's is the most important barrier.

Also female farmers have constraints with house hold activities, child care, livestock and culture barriers. Meanwhile the extension workers feel difficult to approach women for the acceptance of innovation and information because the women might be carrying out the house chores and may depend on the male instead of deciding themselves regarding the change (trainer's guide, 1996).

2.3. Competencies of female agricultural extension workers

"Competence is the capability of a person or an organization to reach specific achievements. At the individual level competence is an integrated performance oriented capabilities, which consist of clusters of knowledge structures and also cognitive, interactive, effective and where necessary psychomotor capabilities, and attitudes and values, which are conditional to out tasks, solving problems and more generally, effective functioning in a certain profession, organization or role" (Mulder, 2001).

This study supports the idea of Van den Ban (1999) about the competences of extension worker as narrated below:

An extension worker can only be successful if the farmers have confidence in her/his expertise and willingness to serve their interests. It is important that s/he is able to communicate with farmers and to plan her work effectively. As communication skill is one of the most prior competencies of extension workers.

According to Ray, 1999 the definition of communication gap is: Difference between what intended and what has been obtained or achieved. Communication gap refers to the difference between what was communicated by extension worker and what has actually been received by the farmers. The nature of communication gap is two types, first the message does not reach the target and second the message fails to produce the desired impact, even if it reaches the target. So communication must be made available, need based, be in time and use more than one channel of communication

The extension workers required to have full information about particular extension message for example: an extension worker should be well informed about the research on crop production, as far as this is relevant to solve the major production problems of her farmers. However, theoretical knowledge is not enough. S/he should also be able to recognize production problems in the field, to analyze their causes and to use this knowledge to suggest actions the farmer can take to solve these problems or to prevent similar problems

in the future. This implies that she should be able to integrate theoretical knowledge from research and practical knowledge from farmer's experience.

(Dubey De 1990 cited in Ray 1999) states that Competency refers to the ability of an individual to reach desirable goal. The following competencies need by extension worker which also support the idea of Van den Ban:

1. Technical competency: Familiarity with work, ability of extension worker to understand, handle and apply relevant technical information needed by farmers, experience and training in the technical subject matter.
2. Economic competency: The ability of extension worker to understand the market forces, advice and guide the farmers to maximization of benefits, by organizing the cooperative society, arrange bank credit etc.
3. Scientific competency: It relates to the ability of extension worker to understand the cause and effect relationship and logical approach toward problem solving.
4. Occupational competency. Willingness and skill of extension worker and also to perform the range of physical task and put the result to the farmer and ability to work with the farmers and their confidence.
5. Communication competency. Ability of extension worker to select process and communicate appropriate message to farmers.

Ability to motivate people to action, an educational level consistent with the working situation, agriculture extension should win farmers trust for effective extension. They should try to see everything from the farmer's point of view, goals, their knowledge and use of language. It is more important for an extension worker to be a good listener than a good speaker. Competencies that are needed for effective support of agricultural development cannot be acquired through initial education alone. Certain competencies need to be developed in further training and on the job (Karbasioun 2007).

2.4. Assessing Farmers Training Needs

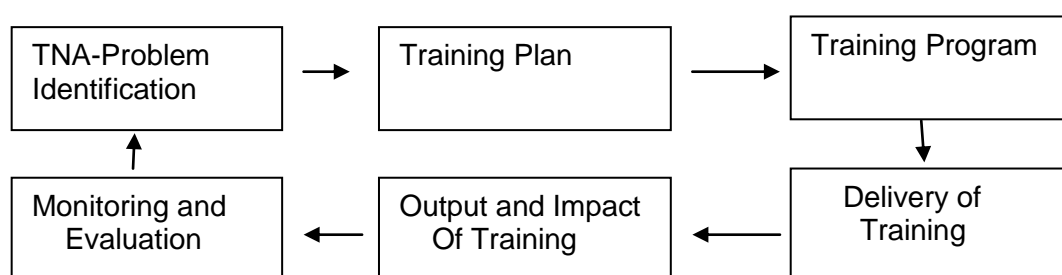
Training needs assessment: Is a systematic way, usually involving rather lengthy process and based on formal needs assessment analysis for identifying learning and training needs. It is one of the many ways that ideas and needs are identified for learning and training programs (Caffarella, 2002). Training has to start with the identification of training needs through need assessment approaches. There are different need assessment techniques such as: Job and task analysis, competency and strategic need assessment, knowledge and skill assessment. Need is the gap between the current condition and a desired condition (Wiley and Inc., 2007 cited in Kebede. W.M., 2010).

Participatory Need Assessment: Is the first step in a process in which professionals and local people form a partnership to identify community needs, set priority and develop a long plan of action to meet these needs (Rifkin, 2001). Likewise participatory needs assessment is important to identify the information and training requirements of the local population or participants, as it is necessary to uncover local skills and knowledge. This is similar with Haan, (2002) statement that important ingredients of successful training interventions were found to include: clear purpose, favourable environment, participation of beneficiaries at all stages, need assessment, training methods, good trainers and financial issues.

Phases of Training: Training is a circular process that begins with needs identification and after a number of steps ends with evaluation of the training activity. Training cycle is the

process of need assessment on training to set objectives and design training curriculum so as to implement training through a series of monitoring and evaluation processes.

Figure 1: Training Cycle



Source: Panjabi (2008), modified in Kebede. W.M., 2010)

Planning phase: considering the existence of assessment in the planning phase hence among all the stages the planning phase is defined in this section. The planning phase contains several activities. A very important step of this phase is training need assessment and curriculum development. Training need is a condition where there is a gap between “What is” and “What should be” in terms of required knowledge, skill, attitude and behaviour for a particular situation at one point in time. The identification of training need is possible through different analytical procedures. The possible methods for individual analysis include performance appraisal, interviews, and questionnaires, analysis of behaviour, informal talks, checklists, counselling, recording, surveys and observations (Swanson et al., 1998 cited in Kebede. W.M, 2010).

Training needs assessment for female farmer

People’s interest and needs are the starting point of extension work. Identifying the real need and interest of the female farmers are challenging tasks. The extension worker should not pass on their own needs and interest to the farmers (Ray, 1999).

Identifying relevant ideas and needs or program content called needs assessment is a major task of people involved with training programs.

Content of the training is one of the important aspect to be considered in the process of human resource development. Training content should be in line with training needs of the farmers. Training plan or curriculum and training programs should correspond with the content of the training (Caffarella, 2002).

Caffarella also affirmed that program planners are fervently seeking to respond to what they and the people, organization and communities they work with perceive as important topics, skills and belief or value system adults should examine or know more about. The training needs are described as gap between what presently is and what should be or expected outcomes. This gap in knowledge and skill could be recognized from an individual, organization or community. Strong opposition to specific programs being planned or currently offered by organization and community may arise, if the organizational ideas and needs are at odds with what individuals or trainees believe they need or want to know more about.

Though ideas, needs, problem or opportunity for education and training programs are gathered in very different ways, ranging from very informal to highly structured processes they always originate from four primary sources: people, responsibilities and tasks of adult life, organizations and communities and society in general.

Likewise needs assessment is important to identify the information and training requirements of the local population or female farmer.

According to (Race, 2010) learning can arise from wanting to learn and from need and necessity to learn and strengthened by doing practical exercise. Race also explained that doing can be in the form of practice, trying out something, experimenting, trial and error, repetition and application. Therefore we need to allow farmers to make mistakes, and help them to gain feedback in a constructive environment, it help them towards becoming experts, then one can make sense out of it. Thus learners need to process information and turning it into their own knowledge. We may never really understand the problem until we start to actually implement some potential solutions. Race also argued, adults learn best when the content of the subject is close to their own task/job. And if motivation is not supported they will switch off or stop learning. Likewise (Harry, 1999) also argued that, adults must have an inner motivation to learn new knowledge or skills. Forcing adults especially women to attend trainings has poor results compared to those who voluntary attend. He also argued that adult motivation to learn is practical.

3. THE RESEARCH PROJECT

3.1. The Research Strategy/Methodology

The research was conducted through a case study. A case study was chosen because it is digging for meaning by studying an issue at depth rather than in breadth of the research (Vershuren & Doorewaard, 2010). For data collection the checklist including planned observation were used. The respondents and informants were selected randomly from research area with different age groups to get insights from the experience of female farmers and female extension workers in order to assess different respondents from different angles of a particular theme and bringing them to gather. The focus group discussion was carried out in two training sessions with open ended questions. The researcher used planned observation and empirical qualitative data in order to get in depth knowledge and insight of the situation.

3.2. Research tools

The data collected in this research project was of three types:

- Desk study
- Interviews
- Observations

Desk study: The researcher reviewed relevant literatures to better understand the situation and context of the problem stated above to find out what other researchers have found concerning the topic. The researcher studied the theoretical concepts of learning needs of farmers and competencies of extension workers, what are the female farmers' need and interest to learn and how HLP is delivering extension services through the female extension workers, what factors influence the performance of female extension workers in the training of female farmers. Additionally, during and after the field work, the updated literatures and documents such as books, internet search, publications, journals, reports and documents from the HLP were used, which were relevant to the research study. It enabled the research to justify the findings with earlier researcher's similar findings.

Interviews: In order to collect accurate data from the field and compare the findings of the literature review with the field, the checklist of questions for interview of female farmers and female extension workers were used. Researcher realized to translate the questions and interview instruments in to local language (Dari), to increase clarity and improve communication during the collection of data. The English questions were carefully translated into Dari in order not to lose the content (See Annex 2 & 3).

It is worth to be mentioned that the researcher pre-tested the checklist to ensure that the assumptions of the checklist were designed properly and clearly. The pre-test helped to identify poorly designed questions and enabled the researcher to make adjustments to the checklist before initiating the case study. The checklist was finalized after the pre-test with a particular focus to make sure the questions were easily understood by the interviewees.

Sample selection: The main actors interviewed in this research study were 20 female farmers who were being trained by the female extension workers were randomly selected. Also the 6 female extension workers, working with HLP in the Mir Bacha Kot district were also selected to know the performance of female extension workers in the agricultural extension trainings of female farmers in Producer Groups. The main actors interviewed in this research were farmers and extension workers.

In this study learner is farmer. A Person who want and need to learn are learners. In an effective learning situation, learners occupy the most important central position and all efforts are directed towards them. Learners should be able to learn, have interest in the subject, have need for information offered and be able to use the information once it is gained (Ray, 1999).

Farmers are the main clients of HLP and the training targeted them to practice or to change their behaviour. The main questions which were asked from female farmers are below: Farmers were asked how they are involved in the extension program and how they learn better from trainings, what are their priority needs, what constraints they face in farming activities and the constraints which hamper their interest in the trainings.

Extension workers were also interviewed in this research because they were the main players in training farmers. Satisfaction of farmers depended on their training methods. Extension workers were asked about performances in agricultural extension trainings such as their training methods, approaches and the methods of service delivery of HLP to female farmers were also focused in this study.

Observation: The farmers training observation was done to find out how extension workers involve female farmers during the trainings, which training methods they use, how they inform farmers for the trainings and how female farmers are given chance during trainings. The researcher observed two training sessions (horticulture and livestock), as a research tool to access the visible factors it was important considerations when farmers and agriculture extension workers were engaged in training.

Data analysis: The research was done through qualitative data analysis; the collected data was arranged according to sub questions and then grouped, summarized and analyzed in MS Excel. The findings presented in tables and figures with the define variables depending on appropriateness, to draw conclusions at the end.

3.3. Reflection on the Research Process

This experience was particularly valuable for the researcher. The researcher believe that what is more valuable is the attitude of the researcher or interviewer toward female farmers, the way of asking questions and how to really listen what farmers are responding. The researcher started the field work with an introductory meeting with directorate of HLP to explain the content and context of the research project and get official permission for the field. Furthermore, the researcher intended to meet the head of some departments in HLP at the province and district level to better understand the situation of the study area by having their valuable advice and information. The researcher met Project coordinator, M&E specialist, National FOD coordinator and FOD project facilitator of MBK. By the help and consultation of mentioned HLP staff the researcher was able to identify female producer groups in MBK from different geographical locations and with different development experience. At first the researcher was supposed to interview 20 farmers from four villages. The field work started with the familiarization visit with coordination of the FOD facilitator for three days beside of interviewing days, because it was important to know about the farmers and extension workers living style, such as; farmers household setups, and dressing style in order to be appreciated from them which was very helpful for the researcher to have close relation with the farmers and EWs by following their dressing style. After spending three days the researcher started the field work. Due to the lack of experience in agriculture field and interviewing farmers for the first time; the first interview took longer, however the language of the researcher was similar to the farmers and EWs but even then it consumed more time for the first interview but the second day it become normal haven't spend more time during interview.

This field work was a learning process, and this experience was in whole valuable for the researcher. She learnt how to communicate with their local language after first interview she

felt very comfortable while talking to farmers. After two days the researcher realized that most of the answers were the same, because she interviewed farmers in front of other group members and extension workers. Meanwhile she decided and conducted individual interviews of the farmer. More than 4 villages farmers were interviewed, to get reliable information and to know more about farmer's need in remote areas so the researcher interviewed the 20 farmers from 9 villages which were selected randomly in order to have more than 4 villages farmers perception and also to go far villages because it was better to have far areas farmers ideas in different geographical locations.

3.4. Research limitations

The major limitations which the researcher encountered during the research activities were: the time constraint allowed for the research in total, unsecure situation and improper transportation in the study area. There was problem to get female farmers on time, because women always occupied with domestic work and need to wait long time to meet them. Interest of the farmers on discussing their financial problems was one of the main constraints for the researcher while interviewing them. Although the researcher declared the objective of the research with details to female farmers, even then female farmers were keen to discuss about their financial problems in order to give them inputs.

The existence of different NGOs in the country and their financial supports caused to make farmers dependent on NGOs financial aids in order to get used to the financial supports from others. This happened with the researcher as well. As she went to the field the farmers had expectation on financial supports from her and when they got to know about the research, they were not interested to give their interview.

3.5. Description of the Study area

The research was carried out in central province of Afghanistan (Kabul). Kabul province is the main capital city of the country which has a total population of 2,425,067 inhabitants, particularly in Mir Bacha Kot district number of males are 16,028 and females are 16,433 in total it is around 32,461. Around 19% of the Kabul population lives in rural districts while 18% lives in urban areas (MRRD), 2007.

Kabul is bordered with Kapisa in north east, Laghman in the east, Nangarhar in the southeast, Logar in the south, Wardak in the southwest and Parwan in the northwest. The total area of the province is 4585 sq km which is divided into 14 districts including the provincial capital, Kabul city (Afghanistan Provincial Reconstruction Team Handbook, 2011). Kabul region has a mainly dry, continental climate with four seasons and an annual rainfall of 400mm between May and November (GRM, 2010). The above climate condition applies to all districts of Kabul including MBK. More than half of the province (56.3%) is mountainous or semi mountainous terrain while more than one third of the area is made up of flat land (37.7%), as the following table shows:

Table 1: Topography Type

Topography type					
Flat	Mountainous	Semi Mountainous	Semi Flat	Not Reported	Total
37.7%	34.6%	21.7%	5.4%	.5%	99.9%

Source: CSO/UNFPA Socio Economic and Demographic Profile

As the province is divided into 14 districts, MBK district is situated in the central part of Kabul province. In horticulture sector cereals and crops particularly potato and wheat are the two staple crops in Kabul province and in the livestock sector Kabul is dominated by sheep, goats, horses, donkeys, cow and poultry. The average farming households owns these cattle for their livelihoods (RRER nd).

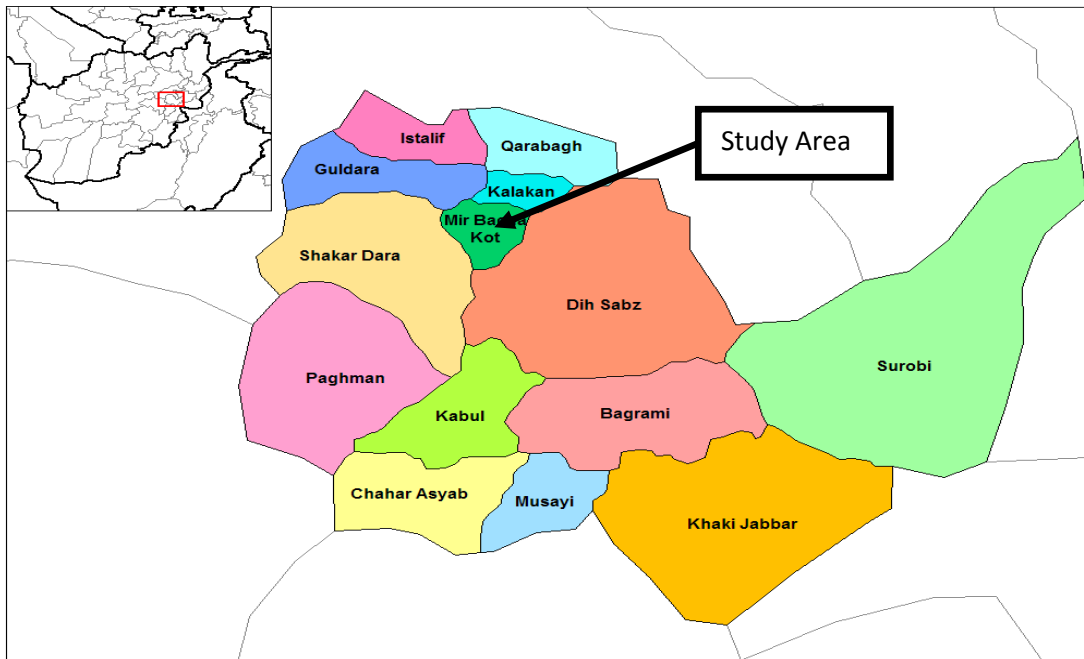
MBK is one of the focus district of HLP in Kabul province, with (37) villages. Its distance from Kabul is 25 KM to the North. The district was almost fully destroyed during the civil war. The main source of livelihood in this district is agriculture (grape farming). The Taliban almost completely destroyed the grape vineyard in MBK. Justification for the destruction was the fact that the harvest from the vineyards could be used for producing alcohol (DFID, 2009). HLP focus villages are: Arzy, Bala-Aab, Guza, Baqa bik, Khowja Gayan, Qali Nasrat, Lagmani, Mewa Khato, Gala-e-Nasro, Shikhan and Shikhan Baqabaik, polle sofyar, Kharoty, Guzar Sar Sumuch, Guzar Masjid, Guzar Masjid Safeed and Seya ab Bala. Majority of ethnic groups are Tajik with some Pashtuns mixed up. In total there is 68 female producer groups with 6 HLP female extension workers in both horticulture and livestock sectors.

Figure 2: Map of Afghanistan



The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations or ReliefWeb. These maps may be freely distributed. If more current information is available, please update the maps and return them to ReliefWeb for posting.

Figure 3: Map of Kabul Province



Source: (Wikipedia, 2011)

4. RESULTS

4.1. HLP and its services to female farmers

HLP aims to enrich Afghanistan's agriculture economy through stimulating marketable output of perennial horticulture and livestock products in the projects focus areas. The project is comprised of four technical components who assist HLP achieve its goals and objectives, technical components are: Horticulture, Livestock, Farmer Organization Development (FOD) and Institutional Capacity Building (ICB) Component. Horticulture component is formed to assist the project target farmers rehabilitate less productive orchards and establish new orchards in focus areas. The livestock component mandate is to promote poultry, dairy production and animal health services. The Component of Institutional Capacity Building assists the two above mentioned components with human and institutional capacities to enable them implement their activities effectively and efficiently.

HLP was suppose to apply the project nationally to all provinces of Afghanistan, but because of security situation was not able to implement it to unsecure provinces. Now HLP has its interventions in 11 Focus Districts (FD), Four in Central regions and 7 Northern regions of Afghanistan. In each of the 11 provinces one district was identified as focus district. Each Focus District is composed up of (FPGs) Male and Female Farmer Producer Groups (HLP Monitoring report, 2010).

4.1.1. Functions of Farmer Organization

Farmer Organization Development (FOD) has established male and female groups in all Focus Districts. FOD helps the project through organizing farmers into groups and provides them necessary agriculture trainings on different improved practices. Farm families are composed of male and female members. In both horticulture and livestock the male and female parts have their specific roles and responsibilities in the production and processing lines. Thus, HLP addresses male and female members of the households alike and provides supporting services to both. Each group is comprised of 25 to 30 members (24 group members and one group leader). The farmer organization is established, from one side to cover a lot of farmers and from the other side this should be a unit for intervention, not only for HLP but for any development project.

Male farmer producer groups are formed in each village among a number of farmers who are interested in learning and applying improved agriculture practices in their orchards. Male members then introduce their family members, relatives, neighbours and friends to form the female producer groups. This way, both male and female members of a village community are benefited from the services provided by HLP. In FOD male and female groups are also dealing and stimulating local savings through the establishment of savings box.

HLP has actively incorporated and supported gender mainstreaming in its activities. In the livestock sector, it has trained 7000 female farmers in the semi-intensive poultry program in seven districts and each woman received fifteen pullets with 25 kg poultry feed, wire mesh, feeder, drinker, vaccination and drugs.

In the horticulture sector HLP has established 170 new orchards for Female farmers in the Central and Northern provinces. It has provided them horticulture packages which contained tools, fertilizers and Integrated Pest Management (IPM) inputs. In addition 750 Female farmers in two Northern provinces have been provided kitchen gardening trainings and seeds (HLP monitoring report, 2010).

4.1.2. HLP Extension Approach

MBK district of Kabul province is one of the focus districts of HLP for rehabilitation. HLP has assigned 6 extension workers, 3 for livestock and 3 for horticulture (Each extension worker is responsible for 18- 22 farmer groups) and the extension workers introduced extension service package to their selected farmers. This extension packages consist introduction of fungicide (making and application of lime sulphur), pruning technique, pruning scissor and sprayer with protection clothes for spraying. These inputs are given to the lead farmers as demonstration for the group members. The extension workers visit each group two times per month, once the horticulture extension workers and once in a month livestock extension workers. The extension workers given the monthly activity plan by the extension coordinator based on the seasonal calendar. HLP has established farmer organizations in target villages as unit for intervention and introduction of its extension package. The main functions of farmer organization in MBK district are to exchange knowledge regarding best orchard management, practices pest control and animal diseases.

The most effective extension approach was the group visit. Out of 6 extension workers and 20 female farmers interviewed almost all of them preferred group visit approach and considered it the most effective one. The reasons of the effectiveness of the group approach are; Maximum coverage in a specific time, brain storming and open discussion, sharing of ideas and experiences. Farmers also mentioned they learn from extension workers and among themselves.

4.2. Female Farmers and their needs and interests

4.2.1. Basic Characteristics of the farmers in the sample

Based on the sampling frame the study population was 26 respondents that 20 of them were female farmers and the rest were female extension workers. The average age of the farmers' was around (37) years old. From the interview it realized that farmers did not know about their age exactly, but they made assumptions, according to their estimations their average age was calculated as 37 years old. The age of the farmers were asked to see the age difference and experience between farmers and extension workers. As a group of people with different experiences and perspectives work on shared problems and jointly develop new knowledge. Education level of farmers might influence their adoption rate and behaviour. These findings indicated that the farmers groups have young members as well. Variety in farmer's age were 20-60 which showed elder farmers were less interested in the trainings as one of them said *"Our time has gone we know from our own experiences how to solve our immediate agriculture problems, it is the younger's turn to learn because they have little experience than us and if I won't be there for them someday, they should be able to solve the problem"*. See annex (4) for the age of farmers. Education level of farmers has been asked to see the reaction of educated and uneducated farmers regarding their learning interests. The assumption was that women with high education status stands better chance to access information and follow recommendations as they are more aware of information sources. Findings (table 2) shows that 15 out of 20 respondents are illiterate, have never attended school and they are unable to read and write and better understand the language of EWs, as many of them mentioned that: *"the EW uses technical language we cannot understand it very well"*.

4 out 20 respondents had education level of below 4th grade. One out of 20 respondents has secondary education (7th grade). Finally none of the respondents had above 7th grade education level in the study area. The result shows that majority of female farmers in the study area had no education and they were not able to read and write. The primary and secondary school attended farmers were eager to join the trainings and learn, openly raised some questions and discussed it in the group. Based on farmers characteristics and per

observation in the study area even the members of mentioned groups with educated farmers were very active, regular and enthusiastic to learn.

The majority of the farmers had never gone to school and they were not even able to read and write. *As one of the 4th grade farmer mentioned “Although we know about horticulture and livestock, we get some new information during the trainings (pruning techniques, spraying) and some useful information about packaging our products and sorting so it is better to learn something than nothing. Like others we also need financial support, but in these trainings we gain those support which will support us in our whole live when we solve problems ourselves”.*

The result shows that 12 of the farmers were married and 8 of them were single. The marital status of farmers was asked to find out the learning interest of married, single and widow farmers. As none of the farmers was widow, but two respondents said that their husbands were sick and paralysed so they have to do all farming activities by themselves and they need to learn more about agriculture. These two farmers were eager to learn the topics which other group members claimed that those topics are male member's task and duty.

Table 2: Basic Characteristics of the Farmers

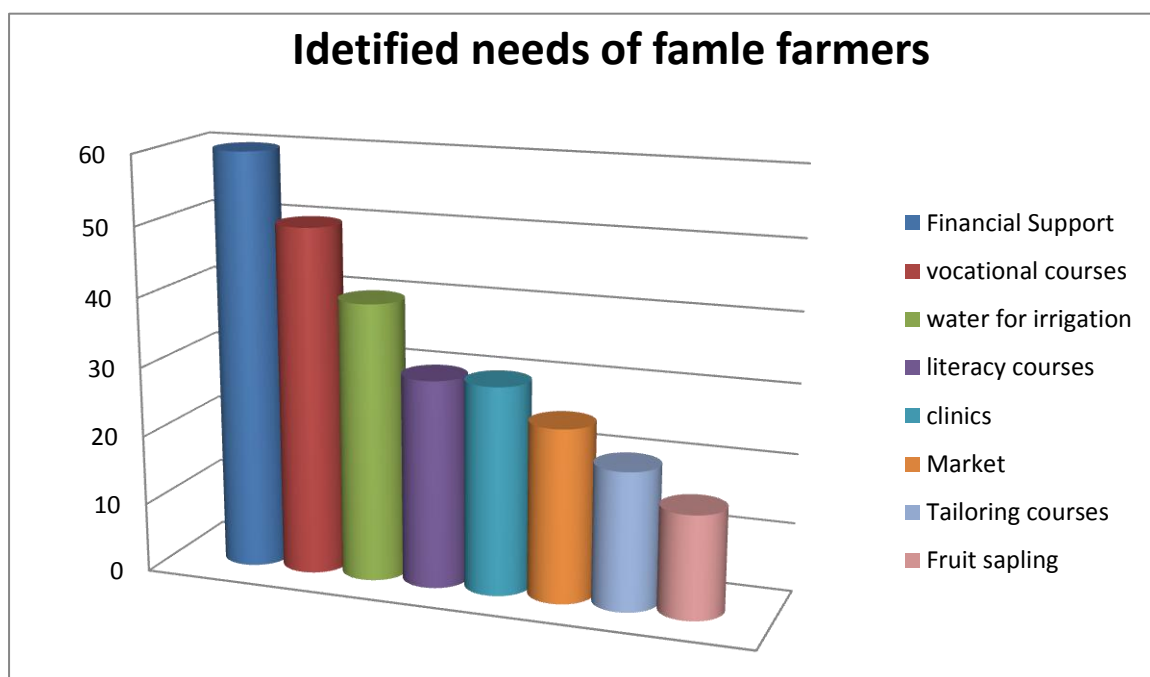
Variables	Women farmers (N=20)
a. Average Age	36.6
b. Marital Status	
• Married	12
• Single	8
• Widow	0
c. Education Level of Respondents	
• High school (12years)	0
• Secondary (9 years)	1
• Primary (6years)	4
• Illiterate (Unable to read and write)	15

4.2.2. The female farmer's needs and interests

As the result indicates that several suggestions were given by farmers regarding their needs such as; High proportion (60%) of the farmers suggested financial support and majority of them had desire that HLP should distribute fertilizers, livestock (Cow, goat and sheep), agricultural inputs and fruit sapling. Half of the farmers mentioned vocational courses in order to have another source of income beside their agricultural activities and most of them suggested tailoring courses. About 30% of the farmers acknowledged for literacy courses they were keen to be educated as they shared their ideas about these courses and consider education as the sign of development. Fahima from Aab chakan village said: “The time is passing and people are going to be educated, If I was educated I would be able to read about agricultural activities to increase my knowledge, but now I really want to be educated in order to be able to increase my knowledge and also to understand the extension trainings as well.” , 40% of the farmers mentioned vet clinics for their livestock due to their lack of access to the clinics they loss their animals or they had to visit the vet in far distance areas. Among farmers 25% of them acknowledged Market, where they can easily sell their crops there with good prices. At the present farmers were suffering from their access to the markets and the local traders were suppose to come to their villages and bought their crops less than market prices which were very in low prices. Similarly some other suggestions were also given by farmers like on time trainings, breeding facilities, extension services and

agricultural training for farmers. The ability of female farmers that they express their needs with confidence is also a positive remark in the success of the project.

Figure 4: Identified needs and interests of Farmers



4.3. Female farmers' involvement in agricultural trainings

MBK district of Kabul province is one of the 11 focus districts of horticulture and livestock project; HLP has assigned 6 extension workers, 3 for livestock and 3 for horticulture (each extension worker is assign for 18- 22 farmer groups). Each group is comprised of 25 to 30 members (24 group members and one group leader). The extension packages consists the introduction of fungicide (making and application of lime sulphur), pruning technique, pruning scissor and sprayer with protection clothes. Inputs are given to the lead farmers as demonstration for the group members. The extension workers visit each group two times per month, once the horticulture extension workers and once in a month livestock extension workers. The extension workers given the monthly activity plan by the extension coordinator based on the seasonal calendar. From the record books (they called it green book) which registered the attendance of women in the trainings and topic of each training were written by assigned EWs, it was observed that usually 20 -15 out of 25 farmers were present in trainings. Some training took two hour and some of the training one or one and half hours. Also the training days were not clear to farmer, what they knew was once a month coming of extension workers.

4.3.1. Reasons that female farmers fail to attend extension trainings

In the individual interviews female farmers gave different responses to the question as why they do not attend the trainings. And what are the expected ways to involve female farmers in extension service. 16 out of 20 respondents explained that they did not attend trainings because they know that there is not practical demonstration of the messages which they can learn on attending trainings instead they use own experience. Respondents prioritized the fact that they fail to attend the trainings because the trainings are not according to their needs and they are not interested in the topics trained by extension workers.

Amina from Pul Sofian village indicated: “I have around 25 years experience, I know more than extension workers. I know much about agriculture so I don’t need further trainings. The extension workers might have read a few books, but I got my hair gray in this field”.

Also the topics which EWs use in the training are not based on the needs of the farmers as the extension workers given the monthly activity plan by the extension coordinator based on the seasonal calendar. The EWs covers those messages which are related to seasonal calendars, but on that time the training needs of the farmers requires another type of messages which they really need for their agricultural activities. For example in the MBK district majority of the farmers cultivate grapes and farmers need extension messages related to their agricultural task or about grapes, whereas EWs gives them messages about drying apricot with sulphur which is not a common crop to be cultivated in the MBK districts and farmers do not need these un related messages.

Also 14 respondents stated that they are responsible for all household activities (i.e. child care, food preparation, cleanliness etc.) which keep them busy and resist them from attending the trainings.

Another response was related to permission from husbands and other male family members. About 9 out of 20 female farmers said the fact that they fail to attend extension gatherings due to lack of permission from their husbands. Due to cultural norms women do not have permission to go out of their homes without Mahram (male members escort) like their husbands or sons are not always available to go with them, hence women could not attend the training regularly. Also 13 farmers revealed that there is no clear time for the trainings. As Maleha from Kharoti village said: “ Whenever the extension workers wish to give us trainings they come to our villages and call us for the trainings, at that time we are busy with our house chores and also there might be no male at home to take us to the trainings, so this prevent us from attending the trainings”.

Regarding the issue of attending the session and being regular the findings revealed that majority of farmers did not attend the training sessions because of their own interest and needs in the topics and no clear time of the trainings. Similarly another farmer mentioned in this regard: “Because we don’t know about the time of trainings that when EW will come, if they inform us in advance we will manage to be present on the training. And will plan to manage our other activities later”

Table 3: Reasons that female farmers fail to attend the training sessions

Reasons for not attending trainings	Number of women who prioritize	Number of women who haven't prioritize	Frequency
Household activities	14	6	20
Permission from husbands	9	11	20
Not interested in farming activities/ Not practical demonstration of the message /Not according to their needs	16	4	20
No clear time for the trainings.	13	7	20

4.3.2. Opinions about improving extension services

To find out farmers opinions about HLP to improve its services means farmers' problems which were not addressed by extension services. Different responses were observed. One is financial assistance responses; second one is farm problem solving responses and marketing problems.

All farmers expressed their views that they need financial support and assistance to run production activities like irrigation related problem, input related problems, cannot afford high cost of fertilizer, pest problems, transportation problem (bad roads, high transportation cost), marketing problem some agriculture tools, livestock mortality, livestock feeding etc. annex 2 and 3 are livestock and horticulture production related common problems faced by farmers according to HLP baseline survey (2008).

Hena from Baqa baig village explained "HLP provides us trainings regarding pruning techniques, applying chemicals and application of lime sulphur etc, if we don't have enough water for irrigation, money to buy these chemicals and to buy some agriculture tools like pruning scissors why we should join these trainings although whatever we are doing is of good skills"

Another common barrier to effective extension work is the extension worker's lack of competence in technical knowledge, farming skills. Like mostly farmers mentioned the following issues: The EWs goes by the book not what is really happening in the field, she is not very sure sometimes about what she is advising us to do and also the EW cannot answer many of our questions.

As one of the farmers mentioned "I could not cultivate vegetables in my field, because of some root disease it become yellow and dry, I share this problem with extension workers to identify the problem, but the extension workers gave neither advice for solution nor took a sample for recognition of disease".

On the other hand it was found that most farmers expressed their views that extension service of HLP is lacking some aspects related to regular and time specific visits. The farmers expressed that there were no regular visits made by extension workers. When another farmer was asked to give her opinion in relation to service and extension workers she said: "I cannot take risk if my crops are getting some diseases first I don't trust the extension workers that they can help me or they have this competency to solve my problem on the other hand the extension workers are coming to train us once a month and sometimes after two months, for solving immediate problems I cannot take the risk of waiting for one or two months till they are coming".

4.3.3. Farmer's opinions on different dimensions of training delivery in HLP

Duration, time, seasons, techniques, content and styles of the training are very important. Training methodology can affect the effectiveness of training as it is shown in table 4.

Table 4: Comments of farmers regarding current training delivery

	Trained farmers (N=20)
	Frequency
Duration of trainings	
• Sufficient	13
• Not sufficient	7
Training methods	
• Mostly theoretical	14
• Mostly practical	0
• Balance	6
Content of the training	
• Relevant	11
• Non relevant	9
Time of the training	
• Morning	15
• Afternoon	5

Table 5: Farmers opinion about preferred training delivery

	Trained farmers (N=20)
	Frequency
Preferred training methods	
• Theoretical	0
• Practical	6
• Balance(theoretical and practical)	5
• Combination of methods	9
Preferred style of training	
• With interval	4
• Continuous	16
Preferred time of the training	
• Morning	6
• Afternoon	14

According to the collected data farmers said that the duration of the training was sufficient according to 13 farmers, unlike 7 of them stated that the duration of trainings were not sufficient. The results show that farmers were satisfied about the duration of the training which is a positive remark for the EWs.

Based on the gathered data 9 out of 20 respondents explained that the training content was not relevant in terms of their farming system whereas 11 out of 20 respondents explained that the training content was relevant.

As far as training methodology was concerned majority of the farmers indicated that training system was class lectures and were carried out more theoretical issues rather than practical issues and some of them said that the trainings covered balanced and mixed type.

Continuous practice of the training is essential according to 16 farmers towards 1-3 days, because farming practices need continuous follow up. As one of farmers mentioned about her interest in continuous practice of training: "Now each HLP livestock and horticulture extension workers conduct trainings once a month if it will be 1-3 days one day they can use theories for the second day will apply it to practice for the third day we will practice it

practically and gain some constructive feedbacks from extension workers". Unlike the present training are being held only for one day and in another session they gave a different message without covering the previous message which is difficult for farmers to link to different messages and also to apply the new messages without demonstration. On the contrary 4 of them preferred the current way.

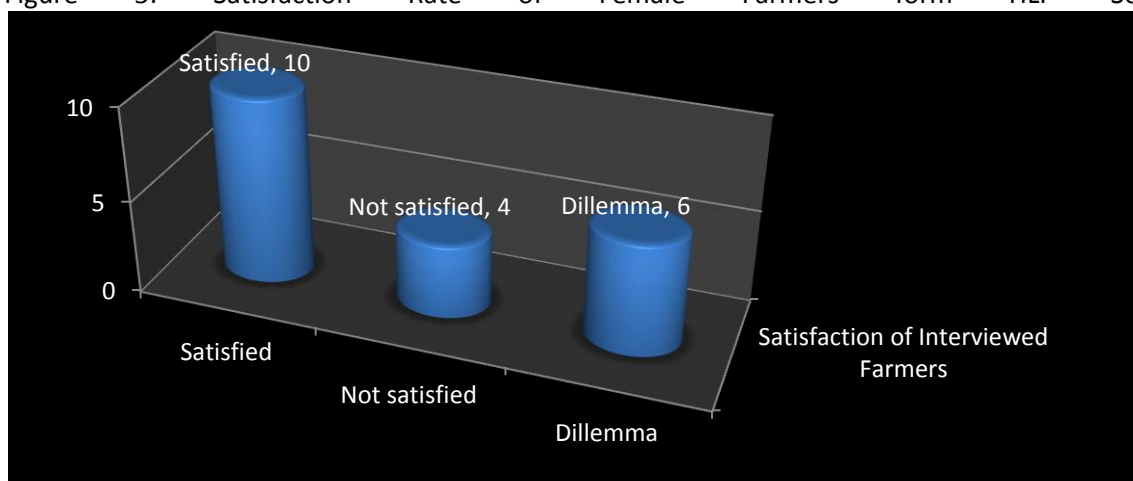
Most mentioned issue was training methods because all the farmers said that it was not practical enough, interest of trainees were in delivery of the practical training but it did not happened. It could be also a reason of not participating farmers with full commitment and interest; rather they were recruited as if some financial assistant is being paid by the trainers.

Because farmers are illiterate the training should be more practical. Farmers said that extension workers of HLP need to conduct as many practical, mix and combination of methods as possible for farmers to learn about agriculture production due their low literacy level. Farmers indicated the timing issue of the trainings. Most of the time the training sessions were held in the morning which is also not a best time for the farmers to attend the training sessions due to their busy household chores and other farming activities, but farmers preferred the session to be held in the afternoon because at that time they do not have any other farming activities and house chores.

4.3.4. Satisfaction rate of farmers from extension services of HLP

In spite of the above reservations, most of the interviewed farmers said they were happy and satisfied with HLP extension service. As they appreciated the effort of HLP by organizing extension training to female farmers and giving them full attention and considering them as an integral part of the society like men. Likewise the farmers said that most of the time they were busy on their farming activity, now it is a good opportunity to get more knowledge and also it is good to get more chance to talk with others and learn from their counter parts by sharing their knowledge and experience.

On the contrary 4 of them said that they were not satisfied from the trainings because it takes their farming activity times and also it does not cover the messages which they are in need of. The rest were in the middles with a dilemma such as: something is better than nothing; it is useful for experience sharing among farmers which is being shown in figure

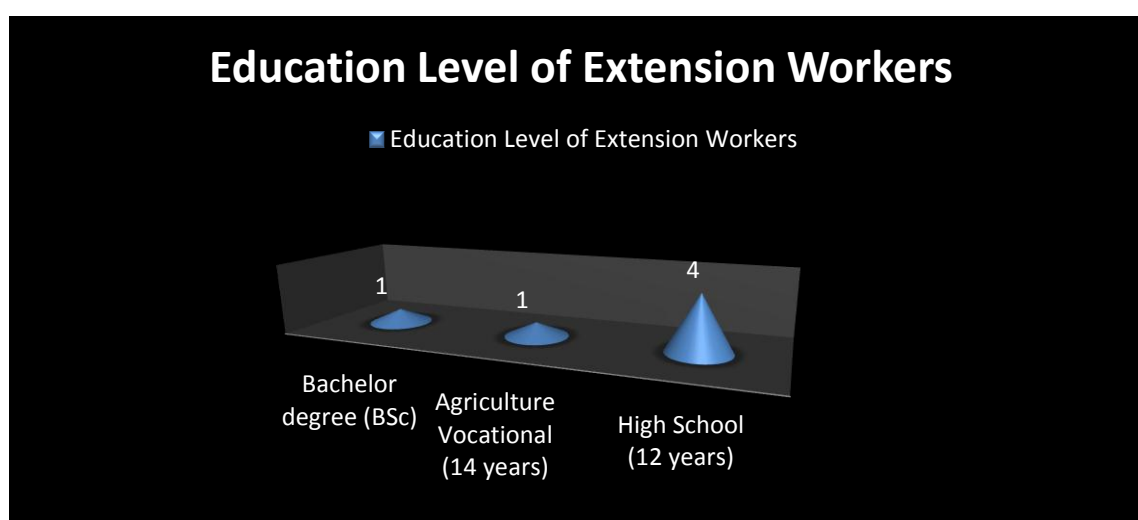


4.4. Performance of the female extension workers in HLP

4.4.1. Background information of the (HLP) extension Workers

Based on the sampling 6 extension worker respondents were interviewed. The average age of extension respondents were 31 years old. The assumption was that extension workers with high education status stand better chance to deliver information as they are more aware of technical issues and sources of information. Finding in figure 6 shows that 4 out of 6 extension workers are high school graduated, one of them has agriculture vocational diploma and one out of 6 respondents had the bachelor degree. Finally no respondents have higher degrees like: PhD and MSc. It can be learnt that majority of female extension workers in the study area had no technical skills or relevant agriculture knowledge as men. Once during field work the researcher had discussion with FOD male facilitator about educational background of EWs in MBK and he mentioned “Male extension workers have more educational skills, experiences and majority of male EWs are bachelor degree holders in compare to female”.

Figure 6: Educational Level of Agricultural Extension Workers



4.4.2. Problems that face female farmers to follow up recommendations

HLP conducted a general training need assessment, but it lacks participation of different stakeholders (farmer) before organizing farmers' trainings as one of the EWs said that the experts do not ask farmers about their needs even they do not ask EWs about the type of the messages, hence the experts organize the topic of the trainings by their own based on seasonal calendar.

Training need assessment should be conducted through direct observation, questionnaire, consultation, focused group discussion, review of documents, but there was no made to ask farmers' needs before and after trainings. Most of the topics the women are supposed to learn are not of their use because those are generally men's gender roles that are one of the reasons points that the women are not interested. One of the extension workers said “we know a lot about farmers' situation because we work together with them (farmers), HLP can

even consult with us regarding farmers needs which they have not done it yet to find out what priority needs do the farmers have”.

From the responses of the extension workers it was revealed that need and interest of women were not adequately reflected in the extension service of HLP. Extension workers were asked to state about farmers constraints regarding follow up the recommendations. To compare how much extension workers and farmers responses matched with each other on the other hand, whether extension workers are capable to indentify farmer's problems. According to the extension workers' responds female farmers did not actively follow recommendations due to the following reasons:

Economic/financial factors: Respondents have ranked high the fact that female farmers face financial constraints. The interviews revealed that farmers are poor so once recommended to apply certain new technological inputs, they cannot afford expenses. Female farmers also ranked high about financial problems /needs.

Socio-cultural factors: The EWs said that female farmers lack education which limits them to follow up instructions properly as required to do. Also EWs claimed that some farmers perceive applying certain inputs will lead the fruits to become big enough but tasteless. As one of the respondents mentioned *“Some female farmers don't like to apply fertilizers because they believe that the fruit will be tasteless even if I recommended them to apply”*

Also EWs revealed the combination of household activities with farming activities; farmers tend to lose concentration on dealing with production activities. Respondents said that household activities keep women busy that they don't get enough time to carry out production activities actively recommended by extension workers.

Extension workers are the closest staff to the farmers that HLP has; in fact they are the most important implementers of the HLP's extension strategies and policies. Extension workers are the ones who know much about farmers' situation because they work together with farmers. From the interviews with the extension workers, different responses were noted by the researcher as follows:

Two respondents from the extension workers said that female farmers are shy and not open to express their problems. In this way it is difficult to get women's problems. Furthermore the extension workers said that sometimes farmers express their problems indirectly, they use other women to ask on their behalf.

One of the extension workers gave another example of getting farmer's problems related to crops by saying:

“Women take me to see extent of problems if their farms are near, but if their farms are far away from the lead farmer's house where the trainings are conducted women normally uproot the affected crop and bring it to me to show for diagnosis of the problem(s)”.

The extension workers said they usually try to find out the source of those problems or if they were not able to recognize the problem(s) the extension workers will take it to technical staff to find solutions and technical advice.

Out of six EWs who were interviewed all of them ranked high the reason that encountered female farmers including to extension services is the constrained by house hold responsibilities that farmers do not get enough time to actively participate in extension services. In addition to this result respondents also added that women are not regularly attending the meetings. This problem makes women fail to catch up the content of the trainings properly. Following these result two respondents had mentioned this:

“It is challenging to work with female farmers because they are busy with their household activities and not regular in attending the sessions this caused to decrease their interest and they sometimes fail to follow my recommendations because of being busy with house hold chores all the time”.

It was revealed that women do not get opportunity to be actively involved in extension services because they do not get permission from their male family members. They are not interested in the trainings, because they do not spend a lot in farming activities and this is problematic for EWs in involving farmers in trainings.

4.4.3. Extension workers’ exposure to agriculture trainings

Agricultural extension training carried out in district level through group approach and the farmers participated in groups to take these services through HLP extension workers.

According to the results from the extension workers responded about the provision of HLP’s extension service to farmers. This issue were asked from the extension workers to find out what is the goal of HLP in provision of extension service and different types of answers were given:

The first kind of answers are related to provision of Farmer Organization Development (FOD) aims at organising male and female beneficiaries into groups to enable them collectively address their common needs for quality inputs and improved technologies toward increasing productivity and income in a sustainable manner. One of them also mentioned that: “We do prevention part, we do not recommend medicines”

In the second kind of answers, extension workers said that they deliver different trainings related to agricultural and livestock production like chemical spraying, pruning, methods of milking, poultry keeping and pest control, saving box program to farmer groups. In theoretical and practical methods farmers’ (local) method is compared with the new method side by side. HLP deliver extension services through distribution of some free agriculture inputs (pruning scissors, spraying machine, fertilizers etc). Just to lead farmers for demonstration not all group members. Mostly they give trainings to farmers based on action plan given by FOD facilitator.

From the results of individual interviews female extension workers gave different responses to the question asked: does HLP have any priority goal to women? Respondents said that HLP does not give specific priorities for women’s involvement. Extension workers provide service to farmers but no specific gender is targeted between women and men. HLP has no specific policy to address gender issues, extension service is offered to farmers in regardless to whether men and women, but there is the poultry keeping program which is specifically for women. It is believed that poultry keeping is done only by women.

Results from the interview with six extension workers show that all six extension workers stated that they received trainings according to the seasonal calendar which is made by HLP with a general need assessment. Livestock extension workers stated that they received these trainings 1 or 2 days with soft and hard copy of the materials which they were going to train farmers. Three horticulture extension workers said that they received these trainings 1-3 days according to the seasonal calendar and they are making short note to train the farmers. EWs covers training messages according HLP seasonal calendar and they do not have separate training messages schedules.

4.4.4. Improving women's participation in extension and training

Four out of the six extension workers indicated that they did not receive any gender related trainings by HLP and they also need trainings about effective communication and presentation skills, technical trainings, fumigation of fruit trees, application of new chemicals, and different types of grafts, rising of different flowers because women are interested in these topics and ask questions, so the EWs emphasized on their lack of information which were really important for them to use it in their trainings and they indicated that the mentioned issues are very important for them to have information for better delivering the trainings.

The results from the interview shows that each EWs covers around 18-22 groups, each group contains 25 farmers. Over all there are 68 groups in 37 villages of MBK which 66 of them are active and 2 groups are not active. All these are single sex groups because contact between men and women are restricted in Afghanistan. These 22 groups are difficult for one extension worker to effectively reach and train them. According to this response all of them conclude that it is hard for EWs to access many farmers especially the remote ones where there is problem of infrastructure and transportation. Extension workers have no transportation facilities, they are given by HLP 100\$ per month for their transportation allowance which is not enough. As they said that most of the time they are not able to access all 22 groups instead they are able to provide trainings to around 18- 19 groups per month. Extension workers are not being able to reach out on all farmers in remote areas.

5. DISCUSSION

This chapter discusses the results from the case study in chapter five against the literature review. It covers the analysis of goals and scope of HLP, training needs of female farmers, involvement of farmers in extension trainings of HLP and the competencies of HLP female agriculture extension workers.

What HLP is offering is largely the same for both male and female farmers. They have the same approach, the same way of working with men and women, as HLP conduct a general need assessment for all regions and all male and female groups. It shows that HLP gives the same quality of training approach to both male and female farmers and it considers gender balance which is remarkable, because at the present women needs to be supported and takes into account in order to be a part of the country's development. Agriculture is one of the sectors which needs the work of both male and female, in this respect it is appreciated that HLP has not overlooked to the female farmers which is a great effort.

The group functioning of HLP trainings apparently seems well and are in good conditions because the female farmers keep coming to these training sessions and many groups are still functioning good. However the female farmers also complain a lot for many reasons which might also include invalid reasons that HLP might not afford.

The education level of female farmers was an important factor to influence possibilities of female farmers in taking notes during the trainings. It can be noted that low educational level of farmers decreased awareness about extension information among female farmers such they failed to follow recommendation and recommended technologies of EWs. The primary and secondary school attended farmers were eager to join the training sessions and learn, and openly rose some questions and discussed it in the group. As per observation the groups with these educated farmers even affected other group members and they were very active and enthusiastic to learn. According to the results a majority of female farmers were illiterate in MBK district, had no education background and this influence the communication gap between farmer and extension worker and a barrier to effective communication through written materials.

According to Leeuwis extension workers should support horizontal knowledge exchange, because Individual farmers usually have much expertise based on experience. Farmer-to-farmers (horizontal) exchange of knowledge is informal means of exchanging information. The group approach seems to stimulate this and mostly farmers were satisfied with this approach of HLP. In situation of Afghanistan the horizontal exchange of knowledge in general is very effective for both male/ female farmers. Farmers also mentioned they learn through both vertical and horizontal movement of knowledge, i.e. from extension workers and among themselves.

HLP decides on the training content according to general need assessment HLP which is one of the most important aspects to be considered. Training content should be connected with training need of farmers. From the results it was revealed there were no clear objectives that focus to female farmer's needs. The findings indicated that farmers had not participated in the process of training need assessments, to identify their knowledge gap and their training interest this is also one of reasons that female farmers fail to follow up recommendations. On the other hand, sometimes it could be seen that farmers' needs were wish lists. Several needs and interest are not in line with what HLP is offering. HLP is not able to take each farmers needs in account and offer them what they need.

Even some findings show that the content of the trainings done by HLP does not completely take into account farmers gender needs and interests, because content of the trainings were prepared to train farmers based on tasks and duties presented in the seasonal calendar. Farmers were not involved while the contents of the training modules were produced. HLP

assumed they know what the farmers needs are without involving them in conducting needs assessment. Different farming system requires different extension recommendations like female farmers who grow only fruit do not require same recommendation as those who grow vegetables and fruit. Development programs with top down initiatives hardly reach farmers needs as Leeuwis (2004) indicated that top-down planning is an obstacle to change and innovation. In order to take into account farmers' involvement in the trainings HLP needs to consider women's training needs. If the training needs of the farmers are considered in the training it would increase women's ownership of the trainings and make them responsible for their own knowledge enhancement in agriculture sector.

HLP has not provided any material inputs to the members of Horticulture/ livestock Interest Groups (HIGs).HLP has been providing material inputs only to lead farmers for the demonstration of input use. The reality and the challenge of lack financial supports makes even some of the current trainees to feel as if they are investing their precious time acquiring knowledge that they may not be able to apply.

Leeuwis (2004) says there is often tension between the interest of the extension organization and the interest of farmers. In this way there is a need at least to link between the interest of client and extension organization, otherwise the people won't be willing to change.

Some farmers claim that extension service of HLP lack regular visits and trainings to farmers. This case study found that each extension workers covers 22 farmer groups which are too large for an extension worker to effectively deliver extension service. It causes that they failed to cover all 22 groups all the time and they reach some groups only after two months.

Also some female farmers said that even if they get extension services they will learn nothing from those theoretical trainings, they prefer to use their own local methods, experience and beliefs and this fits them better than recommended practices from extension workers.

This study also confirmed that the extension workers do not have enough practical knowledge on their field of expertise; which affects their ability to train farmers. As a result, right now, trainings are more theoretical than practical. According to farmers' response, if farmers' training is supported by effective practical training and with improved technologies, farmers would be more eager to attend trainings.

Regarding to the preferred training methods, the majority of the trainees were interested and choose a combination of methods which allowed them to participate, observe and reflect personally on the subject of interest. These preferred training methods assisted them to have a better understanding of the knowledge and skills being taught and seen. Using varieties of extension methods is important for women's involvement in extension service. Choices of methods particularly for female farmers should consider socio cultural norms, time constraints, and available communication.

From the results, it was revealed that extension workers perceived female farmers that are financially poor and always busy with household responsibilities. Financial problems constrained women farmers to afford input expenses which would enable them to effectively follow recommendations. In addition to that it was found that, women fail to catch up the recommendation and following up the learning. Besides female farmers are not even able to read instruction, it gives women an extra way of communication barrier.

Another finding was that farmers often did not participate in the training as it was expected by the extension workers. It seems that some extension workers do not have well technical capacity and interest to train farmers, as trainees will only want to be involved in the training

program if they have confidence that they can solve their problem or will be supported effectively by other actors in finding solution to their problem. If this is lacking trainees will not be motivated to participate in any development program. Adults are not likely to engage in learning unless the learning is meaningful to them because they are pragmatic in their learning; they want to apply their learning to present situations (Caffarella, 2002).

Regarding technical agricultural competence of extension workers, Van den Ban, (1999) wrote that an extension worker should be well informed about the research on crop production, to solve the major production problems of her farmers. However theoretical knowledge is not enough, she should also be able to recognize production problems in the field, to analyze their causes and to use this knowledge to suggest action the farmers can take to solve these problems or to prevent similar problems in the future.

(Dubey De 1990 cited in Ray 1999) mention the economic competency. The ability of extension worker to understand the market forces, advice and guide the farmers to maximization of benefits, by organizing the cooperative society, arrange bank credit etc. From the interviews with the farmers it was also revealed that attention should be given to the provision of skills which is directly linked with employment and income generating opportunities. Farmer's motivation for learning is to produce safe food for the household and also generate income, to improve their resources base for their own product.

Communication is the process through which people exchange meanings. Extension and training draws heavily on communication as a strategy for furthering aspirations. The way which female farmers express their problems is very important aspect to pay more attention by the extension workers for successful service delivery. The findings tell that extension workers find it difficult to get women's problem because they are shy do not openly express their problems instead they use others to ask on behalf of them. This context implies existence of a gap between extension workers and female farmers which limits women to access the service and share farming problems openly.

Everybody learns in his or her own way. Based on this type of situation, extension workers have to understand these differences as resources rather than problems (Leeuwis, 2004). This requires using a variety of methods, including visual and auditory aids. According to extension workers and farmers explanations there are no training aid materials in the study areas. Therefore, the absence of these training aids contributes to a lower effectiveness of farmers training. The extension workers need trainings on how to work with female farmers and promote their involvement in agriculture extension trainings. Like training on gender issues, the preparation and developing of some instructional materials to be used in trainings.

Willingness and ability to work with farmers creates trust and provides effective extension. In the case study, the extension workers found it difficult to work with women farmers. From the answers of extension workers it was revealed that female farmers tend to be busy with household activities. Female farmers were not regular to extension trainings which limit the extension workers to actively involve female farmers in extension services. Regarding the issue of attending the training session and being regular the farmers revealed that majority of farmers do not attend the trainings because of their own interest and needs in the topics and no clear time of the trainings.

The extension workers ranked high the reasons that encountered female farmers including to extension service is the household responsibility constraints. Farmers also rank high the household responsibility constraints within exact and clear time for the trainings. The time of trainings were not clear to farmers, what they know is just once a month and sometimes after two months EWs were coming to train them. It shows that there is a lack of training plan by extension workers which restrict famers in attending trainings.

In short, it was revealed that the HLP female extension workers who work with the female farmers lack some of the above competencies because of their low level of education and their lack of experience.

Millar and Curtis (1997) says that the role of extension worker is letting farmers make their own choices about what they need, build on their own experience and knowledge, encourage both men and women to talk, express their views and ideas, give all members opportunity in groups to have a say and to encourage two way communication between farmers and extension workers.

It is clear that at the moment the reality of the trainings is not even close to that situation. However, in spite of the limited numbers of extension workers and their limited knowledge and skills in agriculture, HLP managed to provide service to lots of female farmers as well as employ female extension workers. It could be seen that the number of extension workers are less due to cultural norms and the current security situation of the country. As a result HLP is trying hard in this sector and has high ambitions for the improvement of agriculture activities of female farmers. This is all a very new experience for HLP which needs to be considered as a positive point. Here also HLP took affirmative action and hired more female staff in order to provide its service to both male and female groups even if the women had less practical experience and technical knowledge.

6. CONCLUSION AND RECOMMENDATIONS

This section draws conclusions based on the analysis and discussion from chapter five. The main findings of the research are related to HLP's current contribution to agricultural extension for women. This was done by exploring the two actors influencing learning space of female farmers trained by female extension workers in MBK District of Kabul province. The end of this chapter will present a number of recommendations to contribute to strengthening of the HLP project.

6.1. Conclusion

Illiteracy runs very high in Afghanistan. Limited number of male and female is educated. Almost all of the female farmers were not able to read and write, a combination of methods would allow them to participate, observe and reflect personally. These preferred training methods will assist them to better understand training messages. Majority of the farmers prefer practical and combination of methods which help them to have a better understanding messages and skills being taught.

The approaches used by HLP give farmers more opportunities to take part in extension programmes. Using farmers groups and network to facilitate innovation and communication among the farmers and improving their skills, merging farmer's indigenous knowledge with new knowledge. Female farmers were happy about group formation and acknowledged they learn well in groups, because when they feel difficulties they can solve each other's problem by sharing information. If sometimes they are not able to join the training session they can ask from other group members. Farmer organizations seem to function well.

As in the current situation in Afghanistan, some national and international organizations has distributed some food stuff and other materials free to people, since that people in Afghanistan got the habit that everything should be provide to them freely. On the contrary HLP's aim is to build the capacity of famers and it does not give anything for free. It could be also a reason that some farmers were not much interested to the training.

It is expected that any farmers group will have many needs. Extension workers may feel what a farmer state as needs is just their wants. In fact it doesn't matter if it is farmers want or need. The matter is that farmers care enough that they are willing to seek help and accept some responsibility to change.

One of the most important issues was regarding what kind of training and extension topics are needed that can improve farmer's productivity and generate income. It can be concluded that attention should be given to skills which are directly linked with women's employment and income generation opportunities. Farmer's motivation for learning is to produce safe food for the household and also generate income, to improve their resources base for their own product. However the women had other needs in this area too. As far the results indicates according to priority farmers suggest financial support, vocational courses, literacy courses, clinics, market, tailoring courses, fruit sampling, on time trainings, breeding facilities and some other training. It was found that interest and needs of the farmer are the fuels which guide the extension services into activities. The study revealed that HLP extension services do not completely address the practical or the gender needs of female farmers. In this case it could in turn promote female farmers to have opportunity of benefiting from the services.

Mostly training topics were relevant to the farming activities in the study area, but not directly for the women as they concerned tasks that were done by husbands and other male family members. This was confirmed from their different needs that farmers cannot be considered

to be a homogeneous category, sharing exactly the same sort of problems and facing the same constraints.

HLP's aim is to increase production and productivity, but not about the market, which won't be profitable to the farmers without having a good market. Female farmers in the study area complained that they lack financial support; this increases the ability to access new and improved technological inputs. HLP has just provided some inputs like sprayer, pruning saw and scissors freely only to the group leaders for demonstration not to the other group members.

Extension workers of HLP lack skills and knowledge in extension methods, communication and presentation skills to work. Trainings could equip extension workers with new and relevant knowledge and skill about extension service delivery. Due to a lack of academic background extension workers lack knowledge in understanding the problems of women farmer. HLP relied on a general need assessment for all regions and all kinds of farming system without addressing gender issues and gender needs and interest of men and women.

1.1. Recommendations

Based on the conclusions, the following points are suggested to improve and widen the learning space between female farmers and female extension worker.

Since HLP conducted the trainings according to the seasonal calendar, a more systematic and specific assessment is needed in their program formulation to keep extension programs relevant to the need of female farmers before any training program is planned and designed. While designing the agriculture training curricula, apart from the content, also duration, timing, methods and materials should be according to female farmer's needs. Attention should be given to the provision of farmer's skills which is directly linked with employment and income generating opportunities.

The importance of practical training is highly praised by female farmers. Therefore, to make the trainings more effective and interesting extension workers should carry out practical training which is very useful for illiterate farmers to upgrade their knowledge and practical abilities and the use of visual aid should be incorporated in the facilitation of the training program to encourage trainees' participation and improved understanding of training content.

HLP is recommended to provide inputs to all group members, not only to group leaders; for the member's encouragement to join the group or to motivate them to try some of the suggested technologies.

To build the capacity of the female farmers, HLP will first have to take into consideration to build the capacity of its extension workers by training extension staff on presentation skills, communication methods, problem and need identification to make sure they adequately address the concerns of farmers regarding communication skills, how to deal collectively with a group, how to facilitate farmers.

In order to conduct trainings regularly the extension department should take action to employ adequate number of women extension workers as the coverage of one extension worker is too large at the moment.

HLP is recommended to consider the hiring of female extension workers which will be a community member, in this case they (farmers & EWs) are living and deriving a livelihood within the community and they will be accessible and understand the community's strengths, vulnerabilities and aspirations better than usually more educated, professional extension agents. She knows the language and has intrinsic understanding of community cultural norms, customs and practices. They can persuade or attract others to good farm practices through teaching, visiting and demonstration in the process of carrying out their farm work.

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Annex 1: Time Schedule

Schedule	Activities	Target Output
June 1 st –June 15	Research proposal	First draft of research proposal.
June 15 - July 8	Desk Study literature review Consultations with Supervisor	Final draft of thesis report and literature review
July 9	Trip to Afghanistan	
July 11-15	Preparation for the field work Visiting HLP office and its staff Arrange schedules for the interview	Arranging the schedule for interview
July 16 - 5 August	Field work interview with women farmers and female agriculture communication workers	data collection
August 6 -19 Aug	Data analysis and results	Data validation
Aug 20	Trip to NL	
21Aug – 29 Aug	Report writing	Draft Thesis Report prepared
1 Sep- Sep 8	final draft	MSc thesis defence
Sep. 9	Submission of Thesis Report	Thesis report submitted

Annex 2: Checklist for female farmers

1. **Date:**
2. **Introduction**
 - a. Self introduction
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.....
 - b. Objective of the study
.....
.....
3. **Personal information**
 - c. Name.....
 - d. Name of village
 - e. Age.....
 - f. Marital status
 - g. Education level.....
4. **Extension related Questions**
 - h. What benefits do you get from accessing extension services of HLP?
 - i. What priority needs you have from extension services/ trainings?
 - j. Do you think your main problems/ needs are addressed by extension service of HLP? If yes how they address?
 - k. In your opinion how can HLP improve extension services?
5. How do you get extension information of HLP? How information is providing to you/in what the ways
6. Is the content of trainings relevant to your need and farming practice?
7. What kind of education and skills needed that could improve their productivity and income generating?
8. Which training methodology do you prefer, which methodology usually do they use?
 - l. Demonstration.....
 - m. Class lecture.....
 - n. Group discussion.....
 - o. Mix.....
 - p. Theory.....
 - q. Practical.....
 - r. Sharing personal experience.....
 - s. Visual aid pictures.....
9. Who plans for trainings? How do you get involved in trainings at what stage you participate?
 - t. TNA.....
 - u. Curriculum development.....
 - v. Deciding duration.....
 - w. Training days.....
 - x. Length of training days.....
 - y. Different stages.....
10. Are you able to attend the extension meetings usually? If no what are the reasons that you are not able?
11. What training duration would you prefer? 1 to 2 days, 3 to 5? And your reasons for this choice?
12. What period of the day do you prefer the training to be conducted? Morning, afternoon, whole day and why
13. What extension topics you are interested to know and feel helpful to you?
14. What are the reasons you fail to attend training sessions?

Annex 3: Checklist for extension workers

2. **Date:**

3. **Introduction**

a. Self introduction

.....

.....

b. Objective of the study

.....

.....

4. **Personal information**

a. Name.....

b. Age.....

c. Marital status

d. Education level.....

5. **Service delivery related Questions**

a. What kind of extension service do you provide to farmers?

b. Does HLP have any priority goal to involve women farmers?

c. What training have you received and what needed?

d. When, how long and how many times in a year these trainings will be conducted?

e. Dose HLP involve farmers or extension workers in the TNA?

f. What are the problems of women farmers in following up recommendation?

g. How do women farmers share their problems during delivering service?

h. How many region and how many farmers an extension worker covers?

i. What challenges do you face in delivering service to women farmers?

j. What are the challenges to involve women farmers in extension service?

k. What are the reasons women farmers fail to attend the training sessions?

l. What input do HLP give as motivation to farmers?

6. **Training related questions**

a. Do you get training/ attend courses or workshops related to extension services? If yes, how frequent? If no, why?

b. Were the farmers involved while the content of the training module produced?

c. Which extension approach do you use in your work (individual visit, group approach, and field days)?

d. How often do you get in contact with women farmers?

e. Which technologies are mostly preferred by women farmers?

f. What are the problems you face to delivering extension service to make contact with female farmers?

g. What kind of advice do you provide to the farmers?(technical information, market information, others)

h. Which approach is more sufficient and why?

i. To what extent the project extension policies address women involvement to extension services?

j. What strategies do you use while delivering extension services to farmers?

k. Why women are not fully participated in extension activities?

Annex 4: Orchard Production Related Problems Faced by Farmers

SN	Orchard Production Problems	Key Informant Panels [n=307]	
		[N]	[%]
(1) Irrigation related Problem			
1.1	Limited access to water for orchard irrigation	220	72%
1.2	Shortage of irrigation water in orchards	107	35%
(2) Input Related Problems			
2.1	Lack of improved seedlings/saplings	52	17%
2.2	Lack of fertilizers/unavailability of quality fertilisers in local markets	209	68%
2.3	Cannot afford the high cost of fertilizer in the markets	33	11%
(3) Production Credit related Problems			
3.1	No existing microfinance institution in local area	193	63%
3.2	High interest rates of formal credit agencies	83	27%
3.3	Lack of access to credit facility constrain investment in orchard production	23	7%
(4) Soil Fertility related Problems			
4.1	Soil fertility in orchards are declining over years	70	23%
(5) Pest Problems			
5.1	<i>Shakarak</i> and/or <i>Shepeshak</i> (aphids) squeezes and turns yellow and weakens plants	152	50%
5.2	<i>Khakistarak</i> (powdery mildew) causes greyish spots on the upper part of the leaves causing drying off and falling down of leaves	67	22%
5.3	<i>Malakh</i> (grasshopper) feeds on and damages leaves causing falling down of all leaves	34	11%
5.4	<i>Kerm</i> (worm/larva) feeds on leaves by damaging and weakening the entire plants	27	9%
5.5	Chechak (scales) feeds on leaves and weaken the whole plant	20	7%
5.6	<i>Qarghana</i> (anthracnose) feeds on and damages particularly grape plants as whole	36	12%
5.7	<i>Atishak</i> (downy mildew) feeds on leaves and damages the entire plant	18	6%
(6) Transportation Problems			
6.1	Bad roads spoil the quality of freshly harvested orchard products	130	42%

6.2	Lack of transport in the village	43	14%
6.3	High transportation cost that poor farmers cannot afford to pay and thus forced to sell their orchard products at cheaper price within in the village	42	14%
(7) Marketing Problems			
7.1	Don't have assured market for selling fruits	170	55%
7.2	Uncertain market for timely selling of fruits	122	40%
7.3	Don't have cold storage facilities for keeping orchard products	14	5%

Source: baseline survey (2008)

Annex 5: Livestock Production Related Problems Faced by Farmers

SN	Livestock Production Problems	Key Informant Panels [n=307]	
		[N]	[%]
(1) Livestock Morbidity and Mortality			
1.1	Shortage feed at home for majority of households who poor	68	22%
1.2	Prevalence of Tabaq disease that kills cows and reduce milk production	109	36%
1.3	Lack of veterinary Clinics in proximity; it has been hard to obtain vet services to treat sick animals and prevent their death	121	39%
1.4	Prevalence many other diseases that make animal sick and kill them	29	9%
(2) Animal Vaccination			
2.1	Non-existence of veterinary clinic in the locality	165	54%
2.2	Necessary and quality vaccines are not available locally	102	33%
2.3	High cost of vaccines that most of poor households cannot afford	14	5%
(3) Livestock Feeding			
3.1	Lack of animal feed	206	67%
3.2	Drought damages crops/pasture causing acute shortage of animal feed	63	21%
3.3	Unaffordable high cost of commercial animal feed	32	10%
(4) Cattle Grazing			
4.1	Non-existence of grazing ground nearby thus animals have to be taken far-a-way for grazing	136	44%
4.2	Prolonged drought/dry spells cause feed shortage for livestock	94	31%
4.3	Existing pastures are rapidly vanishing without the government interventions and support for pasture development	19	6%
(5) Poultry Feeding			
5.1	Unavailability of balance poultry feed in accessible area	118	38%
5.2	High cost of poultry feed in distant market places	8	3%
5.3	Shortage of poultry feed at home	33	11%
(6) Marketing of Eggs			
6.1	Limited regular market for selling eggs	62	20%
6.2	Cannot keep eggs for longer for non-existence of cold storage services	31	10%

6.3	Lack of poultry farms for buying improved chicks	14	5%
(7) Marketing of Milk			
7.1	Lack of or limited market for selling milk	166	54%
7.2	Non-existence of dairy plant in proximity Existence of Dairy Farms	42	14%
7.3	Non-existence of milk processing facility	8	3%
(8) Cow Breeding			
8.1	Lack of veterinary clinic in proximity to help timely breeding of cows	130	42%
8.2	Lack of Artificial Insemination (AI) service system to improve cow breed	85	28%
8.3	Lack of improved bulls in locality or in vet clinic	38	12%
(9) Livestock Production Credit			
9.1	Unavailability of suitable livestock credit	190	62%
9.2	High interest rate of credit in formal sources like BRAC	24	8%

Source: HLP baseline survey (2008)

Annex 6: Age Profile of Respondents

Age Profile of Respondents and Informants					
SN	Age Group	Farmer		Extension Workers	
		Number	Percentage	Number	Percentage
1	20-29	8	40%	2	33%
2	30-39	2	10%	4	67%
3	40-49	7	35%		
4	50-59	2	10%		
5	(+60)	1	5%		
Total		20	100%	6	100%

Average Age of Respondents and Informants	
Farmers	Extension Workers
45	35
40	34
20	35
28	23
55	25
26	36
45	
25	
36	
45	
40	
60	
30	
45	
42	
25	
29	
26	
50	
20	
36.6	31.3

Annex 7: Photos



Picture 1: Interview with farmer in Kharoty village of MBK, Kabul



Picture2: Interview with farmer in Seya ab Bala village of MBK, Kabul