

A SEMINAR PAPER
ON
IMPACT OF TRADITIONAL HOMESTEAD AGROFORESTRY ON
LIVELIHOOD OF THE FARMERS IN BANGLADESH

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Impact of traditional homestead Agroforestry on livelihood of the farmers in Bangladesh¹

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ABSTRACT

Over population growth and degradation of land reduce the total land area. Thus homestead agroforestry plays a significant role in improving livelihood for the smallholders in developing countries like India, Bangladesh. Farmers in Bangladesh are very poor. They have not enough land. They cultivated fruits, vegetables, tree, timber species around their homestead and those are managed by traditionally. Traditional homestead Agroforestry supports the livelihoods of a vast number of people through subsistence use of products, such as food, fodder, fuel wood and medicinal plants, cash income obtained from sale of products, and more indirect ecological benefits such as the contributions of forests and trees to agricultural productivity. Thus, all these might be lead to full utilization of both physical & other farm resource available in the farm & mobilize resources that increased food & nutritional security, income as well as improved their livelihoods

Keywords: Population growth, livelihood, Homestead Agroforestry,

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CHAPTER-1

INTRODUCTION

Population of Bangladesh increases in day by day. Growth rate of population in 2016 is 1.37% Population growth has a large impact on the livelihood of smallholder farmers (Josephson *et al.*, 2014). Due to rapid growth of population, farm size are declined. Land fragmentation and declining farm size is a critical problem that smallholder farmers are facing for maintaining the traditional farming practices in (Headey *et al.*, 2014). Bangladesh possesses a glorious tradition of Agroforestry systems practiced by her farming communities. Agroforestry home gardens are age-old and traditional land use systems with protection and production functions, contributing particularly to the food and nutrition security of smallholders (Vieira *et al.*, 2012). It is the form of agroforestry where different kinds of crops, including vegetables and trees are grown in mixture with or without livestock. In this farming system, deliberate planting and management of multipurpose trees and shrubs are followed in intimate association with annual and perennial agricultural crops and, invariably, livestock, within the compounds of individual houses (Alam and Furukawa 2010). Wood, tree branches, leaves and straw are the main household cooking fuels. Agroforestry provides 40% of fuel requirements, another 40% coming from home gardens and 20% from agricultural fields (Rahman,2012).When homestead agroforestry managed by farmer without scientific interruption is known as traditional homestead agroforestry. It is a eco-friendly production system and have no adverse effect in environment. In Bangladesh, innovative farmers have spontaneously developed agroforestry systems in their homesteads and croplands. This provides benefits to the rural community because trees offer facility such as shade, shelter, recreation, agro-ecological balance and so on (Roy *et al.*, 1996). Homestead agroforestry may contribute to uplift the socio-economic condition of the farmers, supply fuel wood, give protection from hazards, provide food and other benefits etc. The farmers thought that the traditional homestead agroforestry systems had significant role in improving socio-economic status and up gradation of environmental condition in the area. Therefore, there is a great scope to improve the prevailing homestead agroforestry practices with the modern agroforestry technology for maximization of income of the farmers. The extent of knowledge regarding changes in attitude in livelihood encouraged them to adopt the traditional homestead agroforestry system which is not sufficient enough to adopt a well planed and highly manageable system

aiming higher profit and uplift of socio-economic condition(Pervin,2007).Traditional agroforestry homegarden is the main livelihood strategy of smallholder farmers that balances and maintains the natural, financial, human, social and physical livelihood assets and delivers essential livelihood outcomes for the livelihood of the rural community. Thus it is necessary to strengthen knowledge on homestead agroforestry for effective utilization of homestead areas with suitable sophisticated agroforestry approach to maximize homestead productivity and family income. (Pervin,2007)

Objectives

The objectives of the seminar papers are:

1. To know the existing situation of traditional agroforestry practices.
2. To getting knowledge about the contribution of traditional homestead Agroforestry on livelihood of the farmers in Bangladesh.
3. To know the existing problems and their probable solution of traditional homestead agroforestry by the farmer.

CHAPTER -2

MATERIALS AND METHODS

This seminar paper is exclusively a review paper so all of the information has been collected from the secondary sources. During preparation of this paper I collected key information from various relevant books, journals, proceedings, reports, publications etc. Findings related to my topic have been reviewed with the help of the library facilities of Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU) and I have also searched related internet web sites to collect information. I got valuable suggestion and information from my course instructors, my major professor and other resource personnel. After collecting all the available information, I myself compiled and prepared this seminar manuscript.

CHAPTER-3

REVIEW OF FINDINGS

Homestead in Bangladesh

The country consists of 85,000 villages and each village contains about 268 homesteads (BBS, 2003). It is the center of socio-economic activities and traditional cultural heritage of villages in Bangladesh. The homesteads-in which the people live in are locally known as '*Bari*', which occur in linear, cluster or individual pattern (Hussain and Miah, 2004). Homestead perhaps the most important production unit in Bangladesh, which accounted about 25.36 million in the country with 21.90 million in the rural areas (BBS, 2001). The average size of the rural homestead is very small (0.02 ha), which varies widely according to region and socioeconomic status of the households. The homestead and their vegetation in saline (south western part) and hill (eastern part) regions are relatively larger in size compared to dry land area (north western part) due to socioeconomic and climatic advantages. There exists a positive relationship between the farm size and homestead area i.e. larger the farm size, larger the homestead area (Anam, 1999; Ahmed, 1999 and Basak, 2002). Depending on the locations, the homestead is raised above the flood level from the surrounding fields.

Traditional systems of agroforestry

Different patterns of agroforestry were common in the early days. For many upland farmers, agroforestry was a way of life. Shifting cultivation, for example, is believed to have originated in the Neolithic period around 7000 BC (Sharma, 1976). In this system, still common in many hilly areas of tropical Asia, Africa, and Latin America, trees and agricultural crops are arranged sequentially in time and space. Its sustainability in the past was due to low population pressure and availability of large tracts of undisturbed forests. Today, shifting cultivation promotes soil erosion and land degradation. In as much as we have alternative methods of soil fertility restoration, shifting cultivation is no longer necessary. Homegarden, or homestead, is another common agroforestry system. In this system, tall trees are intercropped with medium shrubs and short annual crops to produce a variety of foods and green manure besides reducing soil erosion. Intercropping in coconut and oil palm plantations is also common. Farmers generally plant

smaller trees such as coffee and cacao, and banana underneath the palms. To arrest land degradation due to shifting cultivation, a fairly successful system called taungya was developed in the mid-1800s in Burma. In this system, the government gave land to shifting cultivators and allowed them to grow trees and agricultural crops together. When the tree canopy closed and precluded further agricultural cropping, farmers were shifted to another site. Taungya was later adopted by many countries of Asia, Africa, and Central America (King, 1968). Many of these systems have now given way to subsistence agricultural systems in several developing countries. Because subsistence farming practices are not ecologically sustainable and often not economical, interest in agroforestry is increasing.

Attributes of traditional homestead agroforestry

The characteristics of traditional homestead agroforestry have been discussed in terms of area distribution in different components, types of crops, trees grown, diversity of plants and changes made in the homestead agroforestry. A traditional homestead agroforestry is made of a house and other components such as Crops, plants and trees Animal house Tubewell/dug well Open space. The vegetation in the homestead agroforestry can be divided into three categories, viz., crops, woody trees and non-woody trees. Crops such as different vegetables formed the ground strata. Non-woody trees are mostly the middle-strata whereas the trees are the high-strata plants (Jana *et al.*, 2015).

Fruit tree crop association

There are different combinations of fruit tree-vegetable associates. In a study (Ahmed ,1999) a total of 32 vegetables were found to grow in association with trees either under direct shade were food and cash generating plants and the associated fruit trees were Jackfruit, Mango, Date palm, Coconut, Jujube and Litchi etc. The creeper vegetables grown on the trees were sponge gourd, ribbed gourd, country bean, bitter gourd; sweet gourd and most common host plant were jackfruit, mango, coconut, jujube etc. Pineapple was grown under shade of jackfruits, litchi and coconut. It was reported that growing vegetables under trees have benefited the associated trees are given table 1.

Table1. Major fruit tree species in associate with vegetables in the homestead agroforestry area

Tree species	Vegetable grown under trees		Creeper vegetables grown trees as trellis	
	Major	Minor	Major	Minor
Jackfruit	Aroids, Turmeric, Sweet gourd, chili	Indian spinach, Pineapple, Cowpea	Sponge gourd, Ribbed gourd	Country bean
Mango	Stem amaranth, Indian spinach, Turmeric, Aroids, Country bean	Bitter gourd, Cowpea, Zinger	Sponge gourd	Bitter gourd, Ribbed gourd
Date palm	Stem amaranth, Indian spinach	Turmeric, Aroids, Bitter gourd		
Coconut	Stem amaranth, Indian spinach, Turmeric, Aroids, Radish	Pineapple, Brinjal		Sponge gourd
Jujube	Stem amaranth	Indian spinach, Turmeric	Country bean	Sweet gourd
Litchi		Stem amaranth, Indian spinach, Pineapple, Radish		
drumstick		Stem amaranth, Pointed gourd		

(Source: Ahmed,1999).

Use of homestead fruit trees:

The services/utilities of the fruit tree species grown in the homestead are shown in following table 2. It was observed that every species of trees in homestead has multiple uses. Based on

diversified uses/services, the major fruit species were Jackfruit, mango, coconut, black berry, jujube etc .

Table 2. Multipurpose use of fruit tree species grown in homestead area

Tree species	Uses					
	Fruit	Timber	Fuel	Fodder	Furniture	Construction materials
Jackfruit	***	***	*	**	***	**
Mango	***	**	***	*	*	*
Coconut	***		**			***
Betel nut	***		*			**
Lemon	***		**			
Palmyra palm	**		**			***
Jujube	***	*	*	*		
Indian black berry	**	**	*		***	**
Wood apple	***		**			
Litchi	***			**		
Custard apple	**		*	*		
Papaya	***					
Sapota	***		*			
Tamarind	*		**		*	*
Pomegranate	***		*			
Pummelo	***					*
Guava	***		*	*		
Carambola	**		*			
Indian olive	**		*			*
Embilica	**					
Elephant apple	***		*			
Hog plum	**		*	*		*
Bullock's heart	***		*			
Gab	*		*			***
Date palm	*		*			*
Pine apple	***					
Banana	***		*	*		

(Source: Ahmed, 1999)

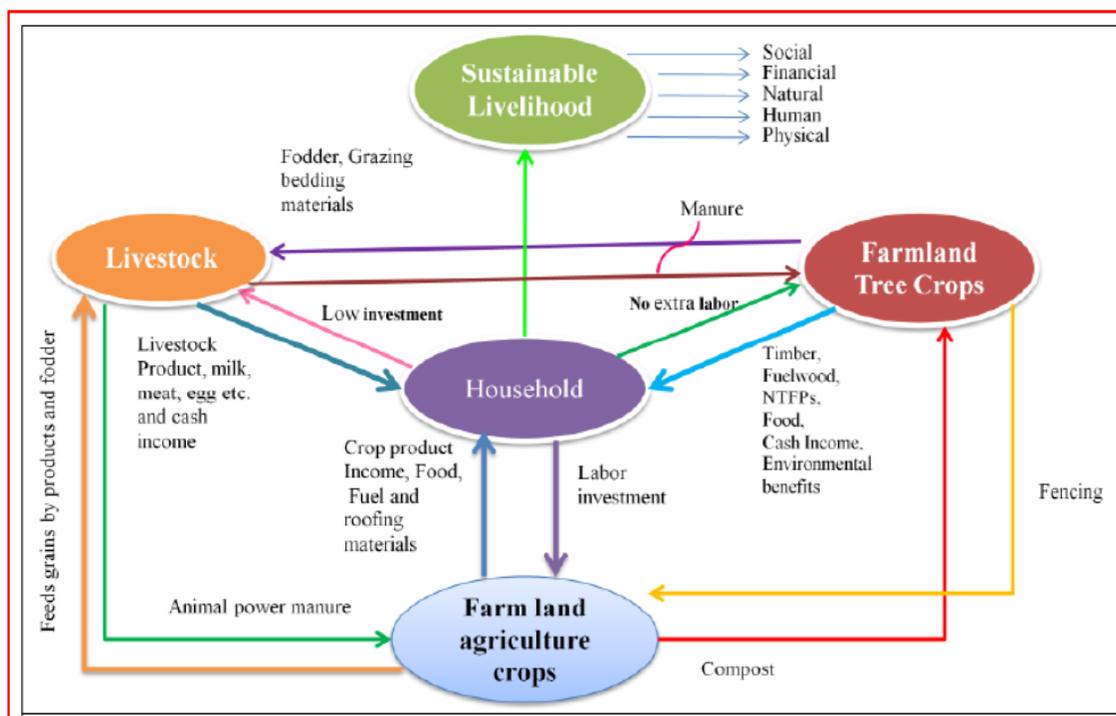
*** =most important use

**= moderate important use

* =less important use

Contribution of homestead agroforestry on sustainable livelihood

Agroforestry is a dynamic, ecologically based natural resource management system that, through which the integration of trees/woody perennials in farm and rangelands, diversifies and sustains production for increased social, economic and environmental benefits (Leakey,1996). Agroforestry was expected to reduce soil erosion, improve soil quality, vegetative cover, land productivity and uplift the farmers level of living through sustained farm productivity9 (Figure- 1). Agroforestry can play a major role in bringing the desired level of diversification along with sustainability.



(Source: Tiwari *et al.*, 2017)

Fig. 1: Contribution of homestead agroforestry on sustainable livelihood.

Homestead agroforestry system supports food and nutrition:

Home garden' (HG) is a complex sustainable land use system (Marambe *et al.*, 2012), which generally combines multiple farming components, i.e., annual and perennial crops, trees, shrubs, livestock and fishery. The flow of goods and services from the HG not only provides the

household needs and employment support, but also environmental services similar to those of natural forests as a result of being a mixed farming system consisting of fruits, vegetables, trees and animals. Gautam *et al.* (2004) reported that in India Agroforestry homegarden contributed 60% of the household's total fruit and vegetable consumption, in Philippines, twenty percentage (20%) of the foods consumed by families are produced in the homegarden whereas in Vietnam 51% of their produce is used by household members. Small animals such as rabbits, poultry and bees can be associated with the garden for animal protein intake and vitamins. A survey in Medinipur District of West Bengal reported that homegarden contributed significantly in providing the consumption needs of vegetables, meat and eggs of the households (Table 3).

Table 3. Household average annual consumption and contribution of Homestead agroforestry for different food items in West Bengal of India

Crops	Food obtained from			
	Total quantity (kg)	Homegarden (%)	Other farm area (own cultivations) (%)	Purchased (%)
Vegetables	6011.06	31.04	46.38	22.23
Leafy vegetables	1283.33	22.38	25.57	51.58
Total vegetables	7294.40	29.52	42.72	27.4
Meat	446.50	28.59	0	71.41
Eggs (number)	2698	31.69	0	68.31

(Source: Jana *et al.*, 2015)

In home garden or agroforestry systems, tree fruits are increasingly cultivated for securing food and nutrition sources during crisis period of a year when adequate access to food is not possible (Rahman *et al.*, 2012). Homestead garden provide approximate amount of nutrients during different periods of the year (Table4). A total of 233,000 kcal energy obtained in a year. Table 4 shows that developed homestead garden provides significant amount of vegetable, i.e. 630.14 g/person/day as consumed by the household that contains 638.36 kcal against the minimum requirement of 200 gm per person/day.

Table 4.Month wise food (in kg) and nutrition supply (‘000) per capita from homestead agroforestry garden

Periods	Vegetables	Home consumption (kg/yr)	Energy (kcal)
Jan-Feb	Tomato	15	5.25
Feb-Mar	Cauliflower	25	5.75
Nov-May	Cowpea	40	19.2
Dec-Mar	Brinjal	37	12.9
Jun-Sep	Okra	31	10.8
Mar-Apr	Tuber crops	14	60.2
Jul-Aug	Cucumber	15	2.25
Aug-Sep	Bitter gourd	31	18.6
Dec-Feb	Chilli	8	2.32
Nov-Feb	Mushroom	14	96.0
Jan-Dec	total	230	233

(Source: Singh *et al.*, 2016)

Fruits production and cost and return:

Consumption of fruits and vegetables is vital for a diversified and nutritious diet for a family. Increasing dietary diversification is the most important factor in providing a wide range of micronutrients and this requires an adequate supply, access to and consumption of a variety of foods.(Iannotti, *et al.*,2009). (Table 5)

Table5 : Performance of quick growing fruit trees in homestead area

Tree	Price (Tk/kg)	Amount harvested (kg)	Gross return (Tk.)	Total variable cost (Tk)	Gross margin (Tk)	BCR
Guava	20	10	200	115	85	1.74
Litchi	120/100 pc.	2500 pc/50kg	3000	1100	1900	2.73
Lemon	45	3	135	65	70	2.08
Mango	60	55	3300	365	2935	9.04
Jackfruit	20	100	2000	265	1735	7.55
Total		218	8635	1910	6725	4.52

Note: 50pc litchi=1 kg, 15pc lemon = 1kg (Approx.)

(Source: Shaheb *at el.*, 2012)

Disposal pattern of harvested vegetables and fruits in homeyard

Disposal pattern of vegetables revealed that farm family did intake more vegetables (298kg) than distribution (46kg) to neighbors and relatives and sale (79kg) (Table 6). The utilization pattern of vegetables showed that the farmers not only consumed their products but also distributed a portion of the product to relatives and neighbors and a portion of them were sold for meeting family needs. The results are in conformed to the finding of Khan et al. (2009) who asserted that farmers consumed their harvested vegetables, sold some of them and also distributed to other to strengthen social relation. The findings also agreed with Islam et al. (2003). Similar results were also observed in case of harvested fruits Bloem et al. (2001)

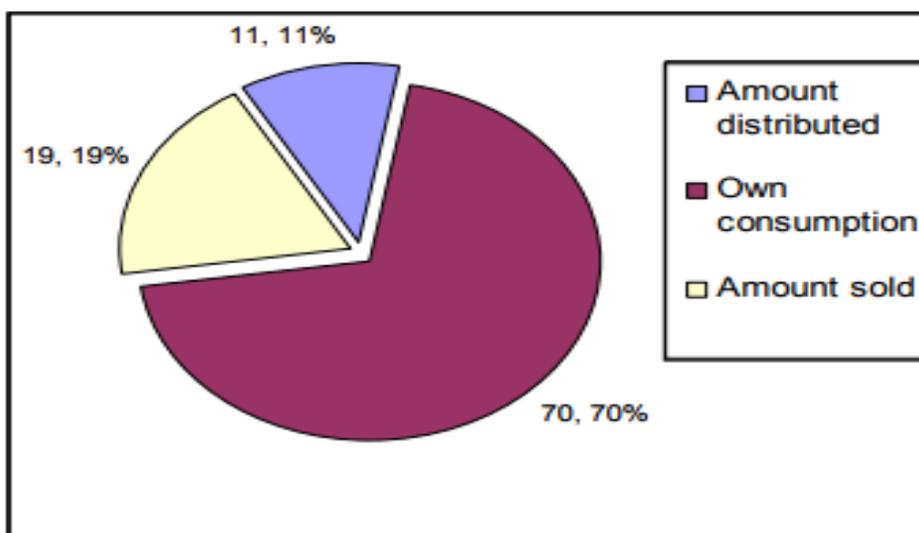
reported that vegetables and fruits production and consumption increased as well as income also increased among the beneficiaries of the homestead food production programme in Bangladesh.

Table 6. Production and utilization pattern of vegetables in homestead agroforestry

Place		Crop	Amount harvested (kg)	Disposal pattern		
				Amount distributed (kg)	Own consumption (kg)	Amount sold
Open Place	Bed - 1	Radish	40	3	32	5
		Tomato	35	2	30	3
		Amaranth	16	5	11	0
	Bed - 2	Laishak	10	2	8	0
		Cabbage	26	4	18	4
		Okra	15	1	12	2
	Bed - 3	Brinjal	19	0	15	4
		Lalshak	10	1	8	1
		Gima kalmi	13	1	10	2
	Bed - 4	French bean	12	2	8	2
Lalshak		10	0	8	2	
Trellis Yard		long bean	25	1	20	4
		Country bean	24	2	18	4
Under trellis		Turmeric	20	2	6	12
		Mukhikachu	20	0	18	2
		Ginger	18	2	4	12
Marsh land	Lotiraj	25	4	15	6	
Shady place	Ginger	20	3	12	5	
Roof	Ash gourd	40	6	25	9	
Tree	Potato yam	25	5	20	0	
		Total	423	46	298	79

(Source: Shaheb *et al*, 2012)

It was observed that 70% of the harvested vegetables were consumed by the farmer's family followed by sale (19%) and the lowest amount (11%) of vegetables was distributed to relatives and neighbors (Fig. 2).



(Source: Shaheb *et al.*, 2012)

Fig. 2. Disposal pattern of vegetables by the farm households.

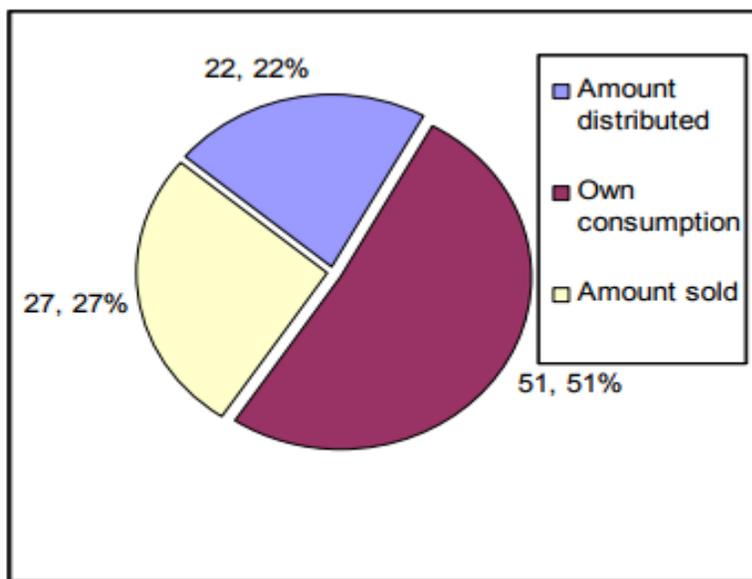
It was found that farm family did intake 111.5kg (> 50%) of fruits that was almost two times and two and half times more than that of the fruits sold (27%) and distributed (22%), respectively (Table 7).

Table7. Production and utilization of quick growing fruit trees

Crop	Amount harvested (kg)	Disposal pattern		
		Amount distributed (kg)	Own consumption (kg)	Amount sold (kg)
Guava	10	2	5	3
Litchi	2500 pc./50kg	750 pc./15 kg	1250 pc./25kg	500 pc./10kg
Lemon	3	0.5	1.5	1
Mango	55	10	25	20
Jackfruit	100	20	55	25
Total	218	47.5 (22%)	111.50 (51%)	59 (27%)

(Source: Shaheb *et al.*, 2012)

Results found that farm family did intake 111.5kg (> 50%) of fruits that was almost two times and two and half times more than that of the fruits sold (27%) that increase their income for sustaining livelihood and distributed (22%) to their relatives respectively (Fig. 3).



(Source: Shaheb *et al.*, 2012)

Fig. 3. Disposal pattern of fruits by the farm household.

Income from homestead: Farmers benefited from homegarden in several ways. Homegarden act as a reserve bank” of food and cash for farmers. The income from homegarden was significantly different within the farm categories. Larger farm categories were getting more income than the smaller farm categories because of having large pieces of land. It was observed that the medium farmers intensively cultivated the homegarden. This might be the reason for getting more income from their homegarden. The annual income derived from each household depending on farm size varies from Tk. 12500 to Tk. 41000 (Table 8). Income from plant species was found more in all farms groups, which is followed by income form poultry and livestock.(Alam,2005)

Table 8: Distribution of income according to farm category (Taka (Tk.)/ Year) (Tk.60=1\$)

Farm category	Income from homestead per household (Tk ./ Plant species Year)			
	Plant species	Poultry and/or livestock	Fishes	Total
Small	6000	5500	1000	12500
Medium	11000	10000	3500	245
Large	15500	13500	12000	41000
Average	10833	9666	5500	26000

(Source: Alam,2005)

Economical aspects of traditional homestead agroforestry:

Homestead- production system that produces multiple products

Homesteads are multipurpose entities with dwellings, vegetables, spices, fruits and fuel wood/timber species. Historically, homesteads have been providing multiple products to the households and meet their diversified need through the production of a wide variety of fruits, Vegetables, spices and different tree products (Miah *et.al.*, 2002). The prevailing climatic and edaphic conditions of Bangladesh are the key factors for providing such a unique opportunity of producing a wide range of products. It has been reported that homestead production system collectively contributes about 70 percent fruits, 40 percent vegetables, 70 percent timber and 90 percent firewood and bamboo requirement of the country (Miah and Ahmed, 2003)

Homestead garden– a platform for employment and economic security

A vast majority of rural people in Bangladesh who cultivate land for crop production remains unemployed for a considerable period of the year because of seasonality of production activities and labor requirements. Homestead farming is the best answer to such unemployment situation through both vegetable growing, and culture of

quick growing fruits enabling the people to remain employed round the year (Ahmad, 1995). It has been found that over the decades, small-scale homestead activities have become the most significant income generating activities of poor households. For example, over 5 million people in Bangladesh live in the riverine sand and silt landmasses (known as char in Bengali). These areas are highly prone to sudden flooding and erosion of land, and makes living in the chars hazardous and insecure. The Helen Keller International's homestead food production program was found to provide support to the fragile livelihood in the chars and improved the well-being of the entire household by promoting low cost technologies for gardening and livestock-raising, improving food security and dietary practices, providing employment for women and a source of income for the household (Helen Keller International, 2003). *Artocarpus heterophyllus* (Jackfruit) based system provides diversified outputs to the growers. The jackfruit is consumed almost as the main food during the main harvesting periods (July-August) and the seeds are used in various cooked forms (Miah and Ahmed, 2003). In addition, non-edible portion of the fruit and green leaves are fed to cattle and goats, its wood is used for making all kinds household furniture. During the season, almost all members of the family remain busy with harvesting, transportation and marketing of fruit.

Women - the vulnerable group of the society and half of the population have the great opportunity for self-employment in the income-generation activities through the practice of vegetable and fruit production in the homestead. Use of family labour, especially women labour in the production process not only satisfies a wide range of domestic needs more economically but also ensures lowering of production costs and ultimately promotes more income. Average return per decimal of homestead land is far more than that of large farm-households, possibly due to the more intensive labor inputs on the part of women in poor households (Ahmad, 1995).

Livelihood security comparison of traditional agroforestry system and commercial agroforestry system: In the traditional agroforestry systems since the trees are naturally growing especially in traditional agroforestry region and are just allowed to be thriving by the farmers, the

costs associated with management of the trees are negligible except that of indirect costs associated with the shade and competition due to moisture and nutrient needs (Dwivedi *et al.*, 2007)Therefore, only the benefits from trees on account of harvest and sale of tree produce were accounted, while commercial agroforestry system is characterized by trees in close association with crops either on farm bunds/ boundaries or within the fields. Fuel wood (50.6 %) was major driving force for agroforestry adoption followed by additional income (24.4 %) and shade (17.5 %) in traditional agroforestry region indicated in table While, additional income (71.3 %) was the major factor in commercial agroforestry region (Table-9) .Although traditional agroforestry seems less promising as compared to commercial agroforestry, but it is also relevant to the farmers. Both the system will helpful for farmers livelihood.

Table-9: Determinants of traditional Vs commercial agroforestry system

Traditional agroforestry system		Commercial agroforestry system	
Major reason	Percentage (%)	Major reason	Percentage (%)
Additional income	71.3	Fuel wood	50.6
Source of money in emergency	17.5	Additional income	24.4
Source of fuel wood	2.5	Shade	17.5
Source of employment	4.4	Timber	3.8
Others	4.4	Others	3.8

(Source: Dwivedi *et al.*, 2007)

Problem of the existing traditional homestead agroforestry system: (Source: Galhena *et al.*, 2013)

Constraint

- Limited access to agricultural inputs such as seeds, planting material, tools, and capital
- Shortage of land and lack of land tenure security
- Inadequate access to water
- Damage due to insect pests, diseases, animals, and theft
- Poor environmental conditions
- Lack of knowledge, information, and advisory services
- Shortage of family or hired labor
- Poor soil fertility and soil erosion
- Limited access to quality livestock breeds
- Limited marketing opportunities
- Excessive post-harvest losses
- Inadequate research and development on home gardens
- Social and cultural Barriers
- Lack of information on nutritional benefits of home gardening

Probable solution of problem of the existing traditional homestead agroforestry system:(Source: Nair *at el*,1987)

- Increases the value of output on a given area of land through spatial or inter temporal intercropping of tree and other species
- Diversifies the range of outputs from a given area, in order to (a) increase self-sufficiency, or/ and (b) reduce the risk to income from adverse climatic, biological or market impacts on particular crops
- Spreads the needs for labour inputs more evenly seasonally so reducing the effects of sharp peaks
- Provides productive applications for underutilized land, labour or capital

- Creates capital stocks available to meet intermittent costs or unforeseen contingencies
- Provides knowledge, information, and advisory services about traditional homestead agroforestry
- Practices proper cultural management (Pruning, training, fertilization, irrigation, pest management etc.)
- Proper training of growers, farmers and extension agent
- Maximum use of homestead areas for fruit, tree and vegetable plantation.
- Develop proper marketing facilities
- Establishment of processing facilities.
- Encouraging export
- Increasing research and extension efforts

CHAPTER- 4

CONCLUSION

Homestead Agroforestry are dynamic production systems that are prevalent in Bangladesh. Farmers are used to practicing traditional homestead agroforestry systems from time immemorial. They got vegetables, fruits, timber fuel wood round the year, could meet their family needs, as well as distributed a portion of vegetables and fruits to relatives and neighbours, and also sold some surplus products to local markets and increase their income. There are some Problem of the existing traditional homestead agroforestry system like limited access to agricultural inputs such as seeds, planting material, tools, and capital, Lack of knowledge, information, and advisory services, Social and cultural Barriers and so on. Probable solution of problem of the existing traditional homestead agroforestry, increases the value of output on a given area ,increase self-sufficiency, or/ and reduce the risk to income from adverse climatic, biological or market impacts on particular crops, provides knowledge, information, and advisory services about traditional homestead agroforestry, practices proper cultural management (Pruning, training, fertilization, irrigation, pest management etc.),Increasing research and extension efforts etc. Therefore, there is a great scope to improve the existing homestead agroforestry practices with suitable agroforestry approaches for maximizing income of the farmers.

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