



## **Blue Gold Program**

### **Technical Note 01**

#### **Use of ODK software in FFS Cycle 3 (September 2014 – March 2015)**

**Embassy of the Kingdom of the Netherlands,  
Dhaka, Bangladesh**

**Bangladesh Water Development Board (BWDB)  
Department of Agricultural Extension (DAE)**

**May, 2015**



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# Issue and revision record

<b>Revision</b>	<b>Date</b>	<b>Originator</b>	<b>Checker</b>	<b>Approver</b>	<b>Description</b>
Technical Note 01	21-04-2015	Hein Bijlmakers			1 <sup>st</sup> Draft TN 01
Technical Note 01	23-04-2015	Hein Bijlmakers			Final Draft TN 01
Final Technical Note 01	13-05-2015	Hein Bijlmakers	Proteeti Masud	Dirk Smits	Final TN 01

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1.	Introduction	1
1.1	Use of electronic forms	1
1.2	Errors in data	1
1.3	General information about FFS participants	2
1.4	Comparing benchmark data with end data	2
1.5	Conclusions	4
Annex 1	Khulna	5
Annex 2	Patuakhali	15
Annex 3	Benchmark form	25

# 1. Introduction

At the beginning of a Farmer Field School (FFS), the FFS facilitator will interview the participating farmers with a short questionnaire about their farm management and production. The objectives of this benchmark questionnaire are:

1. To establish benchmarks that can be used for measuring progress or changes in behavior.
2. To generate interest and introduce the topics which will be discussed and practiced during the FFS season.

At the end of the FFS the questions are repeated so that participants can measure their own progress. Results, such as an increase of production, can then be presented during field days.

## 1.1 Use of electronic forms

In September 2014, Blue Gold started FFS cycle 3, with modules homestead vegetables & fruits, poultry and nutrition. This involved 40 FFS in Khulna (1,000 farmers) and 48 FFS in Patuakhali (1,200 farmers).

The benchmark forms for these FFSs were completed (on paper forms) in early October. An electronic version of these forms was then designed in ODK software and in December the FFS Organizers (FO) received training on the use of Tablets and the electronic forms. They were then asked to copy the benchmark data from their paper forms to the tablets, which allowed them to familiarize with the use of tablets and ODK software.

In March 2015 at the end of this FFS cycle, the FOs interviewed the farmers again, but this time using the tablets in the field to collect the FFS end data.

Benchmark data and end data were collected from the tablets using “briefcase” software and were exported to excel for calculating totals and averages. Data of Patuakhali and Khulna were analyzed separately to allow comparing differences between the districts.

The benchmark data are available for all 2,200 farmers who participated in cycle 3. The end data are available for 998 out of 1,000 farmers in Khulna (2 forms were missing) and for 1,100 out of 1,200 farmers in Patuakhali (data of 4 FFSs are missing due to absence of 1 FO in the period when end data were collected).

The results are attached as Annex 1 (Khulna data) and Annex 2 (Patuakhali data). The ODK form used is in Annex 3.

## 1.2 Errors in data

Unfamiliarity with the use of tablets (and possibly carelessness) contributed to some errors in the data. For example the user of the tablet sometimes accidentally touches the wrong answer when selecting answers from a list. When selecting their own name (from a list of FOs) this error is obvious and can be corrected, but in other questions a wrong answer will go unnoticed.

Errors were also made when typing. For example in Khulna the benchmark data showed that the farmer with the largest agricultural land had 1500 decimal (which seems very high) while in the end data the largest farmer had 350 decimal. Going back to the raw data it was found that the farmer with 1500 decimal (benchmark) had actually 150 decimal (end data), so the 1500 is clearly a typing error.

Users of the ODK forms will have to pay more attention to avoid making such mistakes.

### 1.3 General information about FFS participants

Some of the collected data can be used to describe the profile of the FFS participants.

#### 1.3.1 Gender

A high percentage of FFS participants are women because this FFS cycle deals with homestead activities (vegetable garden, poultry):

District	Percentage women
Khulna	88%
Patuakhali	92%

#### 1.3.2 Age

In farmer selection for FFS we try to select young dynamic farmers and they should preferably be younger than 50 years old:

District	Average age
Khulna	35
Patuakhali	37

#### 1.3.3 Education

In education of participants we see a clear difference between the two districts:

District	Illiterate or can sign name only	Secondary or higher
Khulna	15%	42%
Patuakhali	34%	17%

#### 1.3.4 Land for agriculture and homestead area

Farmers participating in the FFS are generally smaller farmers:

District	Percentage farmers with no land for agriculture	Average area for agriculture (decimal)	Average homestead area (decimal)
Khulna	5%	73	16
Patuakhali	11%	74	17

### 1.4 Comparing benchmark data with end data

Even though the data are known to contain some errors, the averages calculated for 1,000 or more farmers can still be used to compare benchmark data and end data. But note that differences between these two sets of data may be only partly contributed to the impact of the FFS training; some bias can be expected if the FOs who performs the interview is guiding farmers to expected positive results.

The data can also be used to display some obvious differences between Khulna and Patuakhali.

Here are some examples of comparisons that can be made using the collected benchmark and end FFS data:

#### 1.4.1 Crop diversification

The number of different types of vegetables grown increased significantly. This is of course a direct result of some inputs (seeds, seedlings) provided during the training. It will be interesting to measure this again after one or two seasons:

	Different types of vegetables grown
Bench mark data	3
End data	7

#### 1.4.2 Vegetable production and selling surplus

In Khulna it is more common for farmers to sell surplus production from their homestead area. The increased production during the FFS resulted in much more vegetables being sold:

	Percentage farmers who sell half or more of the vegetables they produce	
	Khulna	Patuakhali
Bench mark data	16%	4%
End data	82%	62%

#### 1.4.3 Preparing Farm Yard Manure

Before the FFS only a small percentage of farmers prepared Farm yard Manure (FYM). By the end of the FFS almost all farmers had a FYM pit, many with the recommended shading. It will be interesting to see (in a follow up survey) if this continues during the coming years:

	Percentage farmers (Khulna and Patuakhali together)		
	No FYM	Pit without shade	Pit with shade
Bench mark data	96%	4%	0.1 %
End data	0.3 %	31%	68%

#### 1.4.4 Number of chickens and chicks

The average number of chicken and chicks increased during the FFS season:

	Average chickens per HH		Average chicks per HH	
	Khulna	Patuakhali	Khulna	Patuakhali
Bench mark data	5	4	3	5
End data	8	8	15	20

#### 1.4.5 Selling of eggs

In Khulna more farmers are selling eggs than in Patuakhali. During the FFS the number of farmers selling eggs increased and also the number of eggs sold per month increased:

	Average number eggs sold per month		Percentage farmers who sell eggs	
	Khulna	Patuakhali	Khulna	Patuakhali
Bench mark data	9	3	46	24
End data	32	9	94	77

Annexes 1 and 2 show many more differences between benchmark and end survey. Not all these differences are expected (e.g. a considerable increase in fruit trees). The fact that benchmark data were first collected on paper forms while end data were collected using tablets in the field could have contributed to these difference, for example if questions are asked in a different way.

## 1.5 Conclusions

Data collection in an FFS using ODK forms on tablets is possible, and the data can relatively easy be aggregated and analyzed to show averages, totals, and maximum/minimum data for large groups of farmers. However, it is clear that errors are made when entering the data. Selecting answers from a list should be easy, but experience shows that sometimes the wrong answer is accidentally touched and the user does not notice or correct the mistake (e.g. number of male/female farmers should be same at beginning and end of the FFS). Also when typing answers (especially numbers) some errors are introduced.

Data collected from 2,200 FFS participants in Cycle 3 show some clear immediate effects of the training (e.g. increased vegetable and egg production). However, to measure real impact and sustainability of the FFS training, it will be necessary to repeat the survey after one or two years.

FFS Organizers (FO), Producer Group Facilitators (PF) and other Blue Gold staff who work with ODK forms on tablets need to be more attentive when entering data and verify each answer before moving to the next question.



## Annex 1

### Khulna

Benchmark data of 40 FFS (Cycle 3) in  
October 2014

FFS modules: Homestead Vegetables and Fruits, Poultry, and Nutrition

#### GENERAL INFO PARTICIPANTS

##### Gender

Women	877
Men	123
Total farmers	1,000

##### Age

Average age	35
Youngest	15
Oldest	55

##### Education

Illiterate	28
Can sign	123
Primary	427
Secondary	384
HCC and above	38
Total farmers	1,000

##### WMG membership

WMG member	975
Not WMG member	25
Total farmers	1,000

##### Land for Agriculture

Have no area for agriculture	48
Have area for agriculture	952
Total farmers	1,000

### Khulna

End FFS data of 40 FFS (Cycle 3) in March  
2015 (data of 2 farmers could not be  
collected)

FFS modules: Homestead Vegetables and Fruits, Poultry, and Nutrition

#### GENERAL INFO PARTICIPANTS

##### Gender

Women	884
Men	114
Total farmers	998

##### Age

Average age	35
Youngest	18
Oldest	54

##### Education

Illiterate	20
Can sign	142
Primary	412
Secondary	406
HCC and above	18
Total farmers	998

##### WMG membership

WMG member	988
Not WMG member	10
Total farmers	998

##### Land for Agriculture

Have no area for agriculture	50
Have area for agriculture	948
Total farmers	998

Average area (decimal) of all 1000 HH	73
Average area (decimal) of 952 HH	76
Biggest area (decimal)	1,500

#### Homestead area

Average homestead (decimal)	16
Smallest (decimal)	2
Biggest (decimal)	82

### VEGETABLES

#### Vegetables in homestead

Grow vegetables	975
No vegetables	25
Total	1,000

#### Which vegetables grown (num farmers)

Gourds	785
Brinjal	603
Leafy vegetables	706
Lady fingers	147
Cabbage/Cauliflower	137
Radish	141
Tomato	279
Aroids	240
Drumstick	247
Other vegetables	32

#### Types vegetables grown per farmer

Average types grown	3.3
Max	10
Min	-

Average area (decimal) of all 998 HH	70
Average area (decimal) of 948 HH	74
Biggest area (decimal)	350

#### Homestead area

Average homestead (decimal)	16
Smallest (decimal)	-
Biggest (decimal)	100

### VEGETABLES

#### Vegetables in homestead

Grow vegetables	998
No vegetables	-
Total	998

#### Which vegetables grown (num farmers)

Gourds	986
Brinjal	981
Leafy vegetables	990
Lady fingers	883
Cabbage/Cauliflower	609
Radish	657
Tomato	896
Aroids	919
Drumstick	720
Other vegetables	557

#### Types vegetables grown per farmer

Average types grown	6.8
Max	10
Min	-

**What happens with vegetables**

Sell none	556
Sell less than half	259
Sell and eat about half	124
Sell more than half	35
Sell all	1
Total farmers	975

**Where are vegetables grown**

Veg in sunny open area	947
In shady area	104
In wet marshy area	131
On hedges or fences	176
On roof	184
Near pond side	147
On macha	91
On macha near pond	131
In pots	6
Other places	8
Total farmers	975

**How many different locations are used**

Average (num locations used per HH)	1.9
Max	8
Min	-

**Where do farmers get seeds**

Own seeds	445
Seeds from DAE	7
Seed from BADC	5
Seed from NGO	11
Seed from company	20
Seed from market	849
Seed from neighbours	58
Total farmers	975

**What happens with vegetables**

Sell none	16
Sell less than half	161
Sell and eat about half	387
Sell more than half	434
Sell all	-
Total farmers	998

**Where are vegetables grown**

Veg in sunny open area	989
In shady area	957
In wet marshy area	931
On hedges or fences	884
On roof	878
Near pond side	807
On macha	887
On macha near pond	736
In pots	235
Other places	556
Total farmers	998

**How many different locations are used**

Average (num locations used per HH)	6.6
Max	10
Min	-

**Where do farmers get seeds**

Own seeds	970
Seeds from DAE	171
Seed from BADC	104
Seed from NGO	223
Seed from company	395
Seed from market	812
Seed from neighbours	365
Total farmers	998

**Fertilizer use in vegetables**

Use no fertilizers	129
Use some fertilizers	846
Total	975

**Which fertilizers are used**

Urea	832
TSP	499
MP	211
Gypsum	7
Zinc	5
Cow dung	246
Chicken manure	89
FYM	13
Compost	8
Total farmers	846

**FRUIT TREES****Fruit trees in homestead**

Have fruit trees	986
No fruit trees	14
Total farmers	1,000

**Fertilizer use in vegetables**

Use no fertilizers	2
Use some fertilizers	996
Total	998

**Which fertilizers are used**

Urea	993
TSP	986
MP	972
Gypsum	464
Zinc	369
Cow dung	814
Chicken manure	647
FYM	970
Compost	219
Total farmers	998

**FRUIT TREES****Fruit trees in homestead**

Have fruit trees	996
No fruit trees	2
Total farmers	998

Types of fruit trees	Total trees	Average trees	Grafted trees	Average grafted
Mango	5,550	5.6	783	0.8
Litchi	207	0.2	34	0.0
Lemon	845	0.9	190	0.2
Guava	1,473	1.5	202	0.2
Jujube	725	0.7	171	0.2
Sapodilla	1,039	1.1	358	0.4
Jackfruit	969	1.0		
Indian blackberry	380	0.4		
Coconut	5,206	5.3		
Date palm	2,535	2.6		
Palm tree	618	0.6		
Papaya	1,216	1.2		
Banana	7,152	7.3		
Other fruits	3,078	3.1		

#### Count fruit trees (per HH)

Max	156
Min	-
Average	31

### PEST AND FERTILIZER MANAGEMENT

#### Pest management

Do nothing	427
IPM	1
Chemicals	572
Total	1,000

#### Money spent on pesticides

No money used	430
Use money	570
Total	1,000

Types of fruit trees	Total trees	Average trees	Grafted trees	Average grafted
Mango	5,749	5.8	768	0.8
Litchi	338	0.3	72	0.1
Lemon	1,010	1.0	234	0.2
Guava	1,537	1.5	279	0.3
Jujube	872	0.9	272	0.3
Sapodilla	1,171	1.2	408	0.4
Jackfruit	1,058	1.1		
Indian blackberry	442	0.4		
Coconut	5,295	5.3		
Date palm	2,567	2.6		
Palm tree	633	0.6		
Papaya	2,256	2.3		
Banana	9,137	9.2		
Other fruits	4,376	4.4		

#### Count fruit trees (per HH)

Max	165
Min	-
Average	30

### PEST AND FERTILIZER MANAGEMENT

#### Pest management

Do nothing	1
IPM	992
Chemicals	5
Total	998

#### Money spent on pesticides

No money used	469
Use money	529
Total	998

**How much money used**

Max (Taka)	7,000
Total (Taka)	211,350
Average (of 1000 HH)	211
Average (of 570 HH)	371

Note that some have said they do nothing and still have an amount here.  
Others said they use pesticides but have spent no money for it.  
Obvious some error answers here.

**Farm Yard Manure**

No FYM pit	946
Pit without shade	54
Pit with shade	-
Total	1,000

**Fertilizers for fruit trees**

Use fertilizers for fruit	39
No fertilizers for fruit	947
Total	986

**POULTRY****Chicken**

Max chicken	60
Min chicken	-
Total chicken	4,593
Average chicken	4.6
Farmers with chicken	862
Farmers without chicken	138
Total	1,000

**How much money used**

Max (Taka)	1,000
Total (Taka)	101,210
Average (of 998 HH)	101
Average (of 529 HH)	191

**Farm Yard Manure**

No FYM pit	1
Pit without shade	251
Pit with shade	746
Total	998

**Fertilizers for fruit trees**

Use fertilizers for fruit	994
No fertilizers for fruit	2
Total	996

**POULTRY****Chicken**

Max chicken	60
Min chicken	-
Total chicken	8,109.0
Average chicken	8.1
Farmers with chicken	935
Farmers without chicken	63
Total	998

**Chicks**

Max chicks	30
Min chicks	-
Total chicks	3,416
Average chicks	3.4
Farmers with chicks	500
Farmers without chicks	500
Total farmers	1,000

**Ducks**

Max ducks	30
Min ducks	-
Total ducks	3,818
Average ducks	3.8
Farmers with ducks	822
Farmers without ducks	178
Total farmers	1,000

**Ducklings**

Max ducklings	45
Min ducklings	-
Total ducklings	1,293
Average ducklings	1.3
Farmers with ducklings	236
Farmers without ducklings	764
Total farmers	1,000

**Eggs per hen per year**

Max	100
Average	42

**Eggs per duck per year**

Max	100
Average	46

**Chicks**

Max chicks	135
Min chicks	-
Total chicks	14,527
Average chicks	14.6
Farmers with chicks	884
Farmers without chicks	114
Total farmers	998

**Ducks**

Max ducks	40
Min ducks	-
Total ducks	6,860
Average ducks	6.9
Farmers with ducks	940
Farmers without ducks	58
Total farmers	998

**Ducklings**

Max ducklings	150
Min ducklings	-
Total ducklings	11,967
Average ducklings	12.0
Farmers with ducklings	832
Farmers without ducklings	166
Total farmers	998

**Eggs per hen per year**

Max	125
Average	78

**Eggs per duck per year**

Max	200
Average	87

**Own eggs consumed per week**

Max	40
Min	-
Total	4,958
Average	5.0
Farmers eating own eggs	910
Farmers not eating own eggs	90
Total farmers	1,000

**Poultry consumed per month**

Max	10
Min	-
Total	672
Average	0.7
Farmers eating own poultry	521
Farmers not eating own poultry	479
Total farmers	1,000

**Eggs sold per month**

Max	200
Min	-
Total	8,604
Average	8.6
Farmers selling eggs	464
Farmers not selling eggs	536
Total farmers	1,000

**Poultry sold per year**

Max	55
Min	-
Total	4,092
Average	4.1
Farmers selling poultry	502
Farmers not selling poultry	498
Total farmers	1,000

**Own eggs consumed per week**

Max	80
Min	-
Total	9,771
Average	9.8
Farmers eating own eggs	971
Farmers not eating own eggs	27
Total farmers	998

**Poultry consumed per month**

Max	11
Min	-
Total	1,337
Average	1.3
Farmers eating own poultry	917
Farmers not eating own poultry	81
Total farmers	998

**Eggs sold per month**

Max	250
Min	-
Total	32,278
Average	32.3
Farmers selling eggs	942
Farmers not selling eggs	56
Total farmers	998

**Poultry sold per year**

Max	120
Min	-
Total	16,239
Average	16.3
Farmers selling poultry	931
Farmers not selling poultry	67
Total farmers	998



**Poultry vaccinated**

Never	972
Sometimes	28
Always	-
Total	1,000

**Hazal**

Use hazal	2
No hazal	998
Total	1,000

**Separate chicks from hen**

Never	999
After 1 week	1
After 2 weeks	-
After 3 weeks	-
After 4 weeks	-
Total	1,000

**NUTRITION****Vegetables washing**

Wash after cutting	998
Wash before cutting	2
Total	1,000

**Meat days per week**

Max days	4
Min days	-
Average days	0.6
Farmers eat meat	579
Don't eat meat	421
Total farmers	1,000

**Poultry vaccinated**

Never	-
Sometimes	46
Always	952
Total	998

**Hazal**

Use hazal	998
No hazal	-
Total	998

**Separate chicks from hen**

Never	10
After 1 week	703
After 2 weeks	281
After 3 weeks	2
After 4 weeks	2
Total	998

**NUTRITION****Vegetables washing**

Wash after cutting	10
Wash before cutting	988
Total	998

**Meat days per week**

Max days	3
Min days	-
Average days	1.0
Farmers eat meat	917
Don't eat meat	81
Total farmers	998

**Fish days per week**

Max days	7
Min days	-
Average days	3.2
Farmers eat fish	996
Don't eat fish	4
Total	1,000

**Eggs days per week**

Max days	7
Min days	-
Average days	1.9
Farmers eat eggs	934
Don't eat eggs	66
Total	1,000

**Fruits days per week**

Max days	4
Min days	-
Average days	0.8
Farmers eat fruits	680
Don't eat fruits	320
Total	1,000

**Eat grams vegetables per week**

Max (grams)	3,000
Min (grams)	-
Average (grams)	903
Farmers eat vegetables	998
Don't eat vegetables	2
Total	1,000

**Fish days per week**

Max days	7
Min days	-
Average days	3.8
Farmers eat fish	985
Don't eat fish	13
Total	998

**Eggs days per week**

Max days	7
Min days	-
Average days	3.0
Farmers eat eggs	996
Don't eat eggs	2
Total	998

**Fruits days per week**

Max days	6
Min days	-
Average days	2.3
Farmers eat fruits	983
Don't eat fruits	15
Total	998

**Eat grams vegetables per week**

Max (grams)	3,500
Min (grams)	-
Average (grams)	1,774
Farmers eat vegetables	997
Don't eat vegetables	1
Total	998

## Annex 2

### Patuakhali

Benchmark data of 48 FFS (Cycle 3) in  
October 2014

FFS modules: Homestead Vegetables and Fruits, Poultry, and Nutrition

#### GENERAL INFO PARTICIPANTS

##### Gender

Women	1,106
Men	94
Total farmers	1,200

##### Age

Average age	37
Youngest	18
Oldest	70

##### Education

Illiterate	54
Can sign	355
Primary	586
Secondary	172
HCC and above	33
Total farmers	1,200

##### WMG membership

WMG member	918
Not WMG member	282
Total farmers	1,200

##### Land for Agriculture

Have no area for agriculture	136
Have area for agriculture	1,064
Total farmers	1,200

### Patuakhali

End FFS data of 48 FFS (Cycle 3) in March  
2015 (data of 4 FFS are missing due to FO  
unavailable)

FFS modules: Homestead Vegetables and Fruits, Poultry, and Nutrition

#### GENERAL INFO PARTICIPANTS

##### Gender

Women	1,030
Men	70
Total farmers	1,100

##### Age

Average age	37
Youngest	18
Oldest	65

##### Education

Illiterate	46
Can sign	353
Primary	505
Secondary	176
HCC and above	20
Total farmers	1,100

##### WMG membership

WMG member	875
Not WMG member	225
Total farmers	1,100

##### Land for Agriculture

Have no area for agriculture	122
Have area for agriculture	978
Total farmers	1,100

Average area (decimal) of all 1200 HH	74
Average area (decimal) of 1064 HH	84
Biggest area (decimal)	600

#### Homestead area

Average homestead (decimal)	17
Smallest (decimal)	2
Biggest (decimal)	150

### VEGETABLES

#### Vegetables in homestead

Grow vegetables	1,173
No vegetables	27
Total	1,200

#### Which vegetables grown (num farmers from 1200)

Gourds	1,031
Brinjal	767
Leafy vegetables	879
Lady fingers	182
Cabbage/Cauliflower	86
Radish	269
Tomato	250
Aroids	140
Drumstick	14
Other vegetables	237

#### Types vegetables grown per farmer

Average types grown	3.2
Max	8
Min	-

Average area (decimal) of all 1100 HH	75
Average area (decimal) of 978 HH	85
Biggest area (decimal)	600

#### Homestead area

Average homestead (decimal)	17
Smallest (decimal)	1
Biggest (decimal)	200

### VEGETABLES

#### Vegetables in homestead

Grow vegetables	1,098
No vegetables	2
Total	1,100

#### Which vegetables grown (num farmers from 1100)

Gourds	1,095
Brinjal	1,093
Leafy vegetables	1,093
Lady fingers	1,010
Cabbage/Cauliflower	596
Radish	1,036
Tomato	1,085
Aroids	772
Drumstick	73
Other vegetables	946

#### Types vegetables grown per farmer

Average types grown	7.3
Max	10
Min	-

**What happens with vegetables**

Sell none	920
Sell less than half	202
Sell and eat about half	36
Sell more than half	15
Sell all	-
Total farmers	1,173

**Where are vegetables grown**

Veg in sunny open area	986
In shady area	222
In wet marshy area	92
On hedges or fences	102
On roof	297
Near pond side	352
On macha	258
On macha near pond	112
In pots	28
Other places	241
Total farmers	1,173

**How many different locations are used**

Average (num locations used per HH)	2.2
Max	10
Min	-

**Where do farmers get seeds**

Own seeds	979
Seeds from DAE	13
Seed from BADC	7
Seed from NGO	14
Seed from company	10
Seed from market	854
Seed from neighbours	182
Total farmers	1,173

**What happens with vegetables**

Sell none	68
Sell less than half	344
Sell and eat about half	516
Sell more than half	168
Sell all	2
Total farmers	1,098

**Where are vegetables grown**

Veg in sunny open area	1,085
In shady area	971
In wet marshy area	924
On hedges or fences	901
On roof	1,043
Near pond side	878
On macha	943
On macha near pond	829
In pots	506
Other places	986
Total farmers	1,098

**How many different locations are used**

Average (num locations used per HH)	7.6
Max	10
Min	-

**Where do farmers get seeds**

Own seeds	1,080
Seeds from DAE	53
Seed from BADC	55
Seed from NGO	377
Seed from company	760
Seed from market	999
Seed from neighbours	831
Total farmers	1,098

**Fertilizer use in vegetables**

Use no fertilizers	452
Use some fertilizers	721
Total	1,173

**Which fertilizers are used**

Urea	654
TSP	488
MP	235
Gypsum	6
Zinc	9
Cow dung	429
Chicken manure	52
FYM	11
Compost	14
Total farmers	721

**FRUIT TREES****Fruit trees in homestead**

Have fruit trees	1,189
No fruit trees	11
Total farmers	1,200

**Fertilizer use in vegetables**

Use no fertilizers	6
Use some fertilizers	1,092
Total	1,098

**Which fertilizers are used**

Urea	1,089
TSP	1,073
MP	1,057
Gypsum	199
Zinc	133
Cow dung	1,029
Chicken manure	730
FYM	1,040
Compost	740
Total farmers	1,092

**FRUIT TREES****Fruit trees in homestead**

Have fruit trees	1,098
No fruit trees	2
Total farmers	1,100

Types of fruit trees	Total trees	Average trees	Grafted trees	Average grafted
Mango	4,646	3.9	142	0.1
Litchi	320	0.3	37	0.0
Lemon	1,140	1.0	110	0.1
Guava	3,167	2.7	179	0.2
Jujube	823	0.7	43	0.0
Sapodilla	37	0.0	5	0.0
Jackfruit	2,508	2.1		
Indian blackberry	285	0.2		
Coconut	3,259	2.7		
Date palm	820	0.7		
Palm tree	1,051	0.9		
Papaya	1,366	1.1		
Banana	8,436	7.1		
Other fruits	1,158	1.0		

#### Count fruit trees (per HH)

Max	179
Min	-
Average	24

### PEST AND FERTILIZER MANAGEMENT

#### Pest management

Do nothing	795
IPM	1
Chemicals	404
Total	1,200

#### Money spent on pesticides

No money used	791
Use money	409
Total	1,200

Types of fruit trees	Total trees	Average trees	Grafted trees	Average grafted
Mango	5,255	4.8	440	0.4
Litchi	777	0.7	215	0.2
Lemon	1,598	1.5	409	0.4
Guava	4,144	3.8	504	0.5
Jujube	1,230	1.1	255	0.2
Sapodilla	209	0.2	17	0.0
Jackfruit	3,098	2.8		
Indian blackberry	685	0.6		
Coconut	3,963	3.6		
Date palm	1,062	1.0		
Palm tree	1,379	1.3		
Papaya	4,117	3.7		
Banana	11,489	10.5		
Other fruits	3,095	2.8		

#### Count fruit trees (per HH)

Max	205
Min	-
Average	35

### PEST AND FERTILIZER MANAGEMENT

#### Pest management

Do nothing	4
IPM	1,090
Chemicals	6
Total	1,100

#### Money spent on pesticides

No money used	517
Use money	583
Total	1,100

**How much money used**

Max (Taka)	5,000
Total (Taka)	192,810
Average (of 1200 HH)	161
Average (of 409 HH)	471

Note that some have said they do nothing and still have an amount here.  
Others said they use pesticides but have spent no money for it.  
Obvious some error answers here.

**Farm Yard Manure**

No FYM pit	1,174
Pit without shade	23
Pit with shade	3
Total	1,200

**Fertilizers for fruit trees**

Use fertilizers for fruit	43
No fertilizers for fruit	1,146
Total	1,189

**POULTRY****Chicken**

Max chicken	45
Min chicken	-
Total chicken	4,766
Average chicken	4.0
Farmers with chicken	1,137
Farmers without chicken	63
Total	1,200

**How much money used**

Max (Taka)	1,700
Total (Taka)	107,167
Average (of 1100 HH)	97
Average (of 583 HH)	184

**Farm Yard Manure**

No FYM pit	6
Pit without shade	410
Pit with shade	684
Total	1,100

**Fertilizers for fruit trees**

Use fertilizers for fruit	1,051
No fertilizers for fruit	47
Total	1,098

**POULTRY****Chicken**

Max chicken	87
Min chicken	-
Total chicken	8,971
Average chicken	8.2
Farmers with chicken	1,090
Farmers without chicken	10
Total	1,100



**Chicks**

Max chicks	100
Min chicks	-
Total chicks	6,535
Average chicks	5.4
Farmers with chicks	671
Farmers without chicks	529
Total farmers	1,200

**Ducks**

Max ducks	21
Min ducks	-
Total ducks	4,112
Average ducks	3.4
Farmers with ducks	952
Farmers without ducks	248
Total farmers	1,200

**Ducklings**

Max ducklings	60
Min ducklings	-
Total ducklings	1,246
Average ducklings	1.0
Farmers with ducklings	145
Farmers without ducklings	1,055
Total farmers	1,200

**Eggs per hen per year**

Max	60
Average	40

**Eggs per duck per year**

Max	100
Average	45

**Chicks**

Max chicks	130
Min chicks	-
Total chicks	21,664
Average chicks	19.7
Farmers with chicks	1,084
Farmers without chicks	16
Total farmers	1,100

**Ducks**

Max ducks	30
Min ducks	-
Total ducks	6,184
Average ducks	5.6
Farmers with ducks	996
Farmers without ducks	104
Total farmers	1,100

**Ducklings**

Max ducklings	50
Min ducklings	-
Total ducklings	15,434
Average ducklings	14.0
Farmers with ducklings	1,097
Farmers without ducklings	3
Total farmers	1,100

**Eggs per hen per year**

Max	100
Average	65

**Eggs per duck per year**

Max	250
Average	75

**Own eggs consumed per week**

Max	66
Min	-
Total	4,100
Average	3.4
Farmers eating own eggs	808
Farmers not eating own eggs	392
Total farmers	1,200

**Poultry consumed per month**

Max	20
Min	-
Total	1,058
Average	0.9
Farmers eating own poultry	701
Farmers not eating own poultry	499
Total farmers	1,200

**Eggs sold per month**

Max	200
Min	-
Total	3,100
Average	2.6
Farmers selling eggs	284
Farmers not selling eggs	916
Total farmers	1,200

**Poultry sold per year**

Max	50
Min	-
Total	4,141
Average	3.5
Farmers selling poultry	446
Farmers not selling poultry	754
Total farmers	1,200

**Own eggs consumed per week**

Max	85
Min	-
Total	6,591
Average	6.0
Farmers eating own eggs	1,041
Farmers not eating own eggs	59
Total farmers	1,100

**Poultry consumed per month**

Max	25
Min	-
Total	2,273
Average	2.1
Farmers eating own poultry	992
Farmers not eating own poultry	108
Total farmers	1,100

**Eggs sold per month**

Max	60
Min	-
Total	9,380
Average	8.5
Farmers selling eggs	843
Farmers not selling eggs	257
Total farmers	1,100

**Poultry sold per year**

Max	150
Min	-
Total	13,929
Average	12.7
Farmers selling poultry	973
Farmers not selling poultry	127
Total farmers	1,100

**Poultry vaccinated**

Never	1,070
Sometimes	130
Always	-
Total	1,200

**Hazal**

Use hazal	134
No hazal	1,066
Total	1,200

**Separate chicks from hen**

Never	1,198
After 1 week	1
After 2 weeks	-
After 3 weeks	-
After 4 weeks	1
Total	1,200

**NUTRITION****Vegetables washing**

Wash after cutting	1,110
Wash before cutting	90
Total	1,200

**Meat days per week**

Max days	5
Min days	-
Average days	0.7
Farmers eat meat	755
Don't eat meat	445
Total farmers	1,200

**Poultry vaccinated**

Never	7
Sometimes	147
Always	946
Total	1,100

**Hazal**

Use hazal	1,096
No hazal	4
Total	1,100

**Separate chicks from hen**

Never	4
After 1 week	835
After 2 weeks	241
After 3 weeks	20
After 4 weeks	-
Total	1,100

**NUTRITION****Vegetables washing**

Wash after cutting	20
Wash before cutting	1,080
Total	1,100

**Meat days per week**

Max days	4
Min days	-
Average days	1.2
Farmers eat meat	916
Don't eat meat	184
Total farmers	1,100

**Fish days per week**

Max days	7
Min days	-
Average days	2.1
Farmers eat fish	1,175
Don't eat fish	25
Total	1,200

**Eggs days per week**

Max days	5
Min days	-
Average days	1.2
Farmers eat eggs	1,034
Don't eat eggs	166
Total	1,200

**Fruits days per week**

Max days	5
Min days	-
Average days	1.0
Farmers eat fruits	921
Don't eat fruits	279
Total	1,200

**Eat grams vegetables per week**

Max (grams)	3,000
Min (grams)	-
Average (grams)	1,178
Farmers eat vegetables	1,198
Don't eat vegetables	2
Total	1,200

**Fish days per week**

Max days	6
Min days	-
Average days	2.9
Farmers eat fish	1,097
Don't eat fish	3
Total	1,100

**Eggs days per week**

Max days	6
Min days	-
Average days	2.0
Farmers eat eggs	1,046
Don't eat eggs	54
Total	1,100

**Fruits days per week**

Max days	6
Min days	-
Average days	1.9
Farmers eat fruits	1,028
Don't eat fruits	72
Total	1,100

**Eat grams vegetables per week**

Max (grams)	4,000
Min (grams)	-
Average (grams)	1,657
Farmers eat vegetables	1,099
Don't eat vegetables	1
Total	1,100

load

form

data

report

## FFS Benchmark Cycle 3 v12 Bangla

FFS Modules

*Homestead Vegetables and Fruits - Poultry - Nutrition.*

### Section A: General Questions

#### A-01 Polder

\*

- 2
- 22
- 26
- 29
- 30
- 31-part
- 43/1A
- 43/2A
- 43/2B
- 43/2D
- 43/2E
- 43/2F

#### A-02 WMG

Type the name of the WMG / Village

**A-03 FO name**

\*

- Muna Lisa
- Aklima
- Asma
- Basar
- Eusuf
- Feroj
- Hafsa
- Mijan
- Nahar
- Nargis
- Nasima
- Nasir
- Popi
- Rasel
- Rohima
- Sabina
- Salam
- Shahidul
- Waliullah
- Zabber
- Zahida
- Zakir

**A-04 Date**

*Date of interview*

**A-05 FFS ID number**

\*

**A-06 FFS participant**

**A-06.1 Participant name**

\*

**A-06.2 Father / Husband name**

**A-06.3 Participant mobile number**

*Enter 11 digit number without spaces*

**A-07 Gender**

\*

Man

Woman

**A-08 Age of participant**

\*

**A-09 Education of FFS participants**

*Select one from list*

\*

Illiterate

Can sign

Primary

Secondary

HHC and above

**A-10 WMG member**

\*

Yes

No

**A-11 Area agriculture (land and gher together) (decimal)**

\*

**A-12 Area homestead (decimal)**

\*

## Section B: Vegetables and Fruits

### B-01 Do you grow vegetables in your homestead?

\*

Yes

No

### B-02 Vegetables grown

#### B-02.1 Gourds

\*

Yes

No

#### B-02.2 Brinjal

\*

Yes

No

#### B-02.3 Leafy vegetable

\*

Yes

No

#### B-02.4 Lady's finger

\*

Yes

No

#### B-02.5 Cabbage or Cauliflower

\*

Yes

No

#### B-02.6 Radish

\*

Yes

No

#### B-02.7 Tomato

\*

Yes

No



**B-02.8 Aroids**

\*

Yes

No

**B-02.9 Drumstick (Moringa)**

\*

Yes

No

**B-02.10 Other vegetables**

\*

Yes

No

**B-03 What happens with the vegetables produced in your homestead area?**

\*

*Select one from the list*

Sell none

Sell less than half

Sell and eat about half

Sell more than half

Sell all

**B-04 Where in your homestead do you usually grow vegetables?**

**B-04.1 Sunny open places**

Yes

No

**B-04.2 Shady places**

\*

Yes

No

**B-04.3 Wet and marshy places**

\*

Yes

No

**B-04.4 Hedges or fences**

\*

Yes

No

**B-04.5 Roof of house**

\*

Yes

No

**B-04.6 Pond side**

\*

Yes

No

**B-04.7 Macha**

\*

Yes

No

**B-04.8 Macha at pond side**

\*

Yes

No

**B-04.9 In pots**

\*

Yes

No

**B-04.10 Other places**

\*

Yes

No

**B-05 From where do you get your vegetables seeds?**

**B-05.1 My own seed collection**

Yes

No

\*

**B-05.2 DAE**

Yes

No

\*

**B-05.3 BADC**

Yes

No

\*

**B-05.4 NGO**

Yes

No

\*

**B-05.5 Company**

Yes

No

\*

**B-05.6 Market**

Yes

No

\*

**B-05.7 Neighbours**

Yes

No

\*

**B-06 Which fertilizers are used in your vegetables garden?**

**B-06.1 Fertilizer use in vegetables**

No fertilizers

Some fertilizers

\*

**B-06.2 Urea**

Yes

No

\*

**B-06.3 TSP**

- Yes
- No

\*

**B-06.4 MP**

- Yes
- No

\*

**B-06.5 Gypsum**

- Yes
- No

\*

**B-06.6 Zinc**

- Yes
- No

\*

**B-06.7 Cow dung**

- Yes
- No

\*

**B-06.8 Chicken manure**

- Yes
- No

\*

**B-06.9 Farm Yard Manure (FYM)**

- Yes
- No

\*

**B-06.10 Compost**

- Yes
- No

\*

**B-07 Do you have fruit trees in your homestead?**

- Yes
- No

\*

**B-08 Mango**

**B-08.1 Mango total**

\*

---

**B-08.2 Mango grafted**

\*

---

**B-09 Litchi**

**B-09.1 Litchi total**

\*

---

**B-09.2 Litchi grafted**

\*

---

**B-10 Lemon**

**B-10.1 Lemon total**

\*

---

**B-10.2 Lemon grafted**

\*

---

**B-11 Guava**

**B-11.1 Guava total**

\*

---

**B-11.2 Guava grafted**

\*

**B-12 Jujube**

**B-12.1 Jujube total**

---

\*

**B-12.2 Jujube grafted**

---

\*

**B-13 Sapodilla**

**B-13.1 Sapodilla total**

---

\*

**B-13.2 Sapodilla grafted**

---

\*

**B-14 Jackfruit total**

---

\*

**B-15 Indian blackberry (jaam) total**

---

\*

**B-16 Coconut total**

---

\*

**B-17 Date palm total**

---

\*

**B-18 Palm tree total**

---

\*

**B-19 Papaya total**

---

\*

**B-20 Banana total**

---

\*

**B-21 Other fruit trees total**

\*

---

**B-22 How do you manage pests in your homestead garden?**

\*

*Select one answer*

- Do nothing
- Use chemical pesticides
- Use IPM

**B-23 How much money do you spend on pesticides per year for your homestead garden? (Taka)**

\*

**B-24 Do you have a Farm Yard Manure pit?**

\*

*Select one option*

- No pit
- Pit without shade
- Pit with shade

**B-25 Do you use fertilizers for your fruit trees management?**

\*

- Yes
- No

**Section C: Poultry**

**C-01 Number of adult chickens**

\*

**C-02 Number of chicks**

\*

**C-03 Number of adult ducks**

\*

**C-04 Number of ducklings**

\*

**C-05 Egg production per hen per year**

\*

Type the estimated egg production of one hen in a year

**C-06 Egg production per duck per year**

\*

Type the estimated egg production of one duck in a year

**C-07 Egg consumption by your family in a week (your own eggs)**

\*

Type the number of eggs the family consumes in a week (only of their own eggs)

**C-08 Poultry consumption per month (from your own poultry)**

\*

Type the number of poultry consumed by the family in one month (only of their own poultry)

**C-09 Surplus sold eggs per month**

\*

Type number of surplus eggs that are sold in a month

**C-10 Surplus sold poultry per year (chicken + ducks)**

\*

Type the number of poultry sold in one month (chicken and ducks)

**C-11 Are your poultry vaccinated?**

\*

Select one answer

- Never
- Sometimes
- Always

**C-12 Are you using a hazal?**

\*

- Yes
- No



**C-13 Do you separate chicks from hen? If yes, when?**

Select one answer

- Never
- After 1 week
- After 2 weeks
- After 3 weeks
- After 4 weeks

\*

**Section F: Nutrition**

**F-01 Do you wash your vegetables before cutting or after cutting?**

Select one answer

- Wash before cutting
- Wash after cutting

\*

**F-02 How many days per week do you eat meat?**

Type number of days per week that the family eats meat

\*

**F-03 How many days per week do you eat fish/shrimps?**

Type number of days per week that the family eats fish or shrimps

\*

**F-04 How many days per week do you eat eggs?**

Type number of days per week that the family eats eggs

\*

**F-05 How many days per week do you eat fruit?**

Type number of days per week that the family eats fruit

\*

**F-06 How much vegetable do you eat per week (estimate in grams)?**

Type the estimated amount of vegetables (grams) that the participant eats in a week.

\*

**Notes**

Write any remark